THE

MADRAS

UNIVERSITY CALENDAR,

1886-87.

VOL. II.

EXAMINATION PAPERS.

MADRAS:
HIGGINBOTHAM AND CO.
By Appointment in India to His Royal Highness the Prince of Wales,
and Publishers to the Madras University.
1886.

CONTENTS.

EXAMINATION PAPERS, 1885-86.

	Page.
List of Examiners	i—v
Matriculation Examination	vii—lxxxi
English	vii
Sanskrit	xii
Latin	xviii
Arabic	xxiii
Persian	xxviii
Urdu	xxxiv
Tamil	xl
Telugu	xlv
Kanarese	lii
Malayalam	lix
Uriya	lxvi
French	lxx
Arithmetic	lxxv
Algebra	lxxvi
Geometry...	lxxvii
Mechanics	*ibid.*
Chemistry	lxxviii
Indian History	lxxix
English History	*ibid.*
Geography	lxxx
First Examination in Arts	lxxxii—clxi
English...	lxxxii
Physiology	lxxxix
Sanskrit	xc
Latin	xcix

	Page.
Persian	cxvi
Urdu	cxiii
Tamil	cxix
Telugu	cxxv
Kanarese	cxxxiii
Malayalam	cxlii
Uriya	cl
Algebra and Geometry	cliv
Trigonometry and Euclid	clvi
History of England	clviii
History of Greece and Rome	clix
Logic	clx
B. A Degree Examination	clxii—cclii
English	clxii
Sanskrit	clxx
Greek	clxxvii
Latin	clxxxiv
Persian	clxxxix
Urdu	cxciv
Tamil	cc
Telugu	ccvi
Kanarese	ccxii
Malayalam	ccxix
Uriya	ccxxviii
Original Composition in Vernacular Language	ccxxxii
Pure Mathematics	*ibid.*
Statics and Dynamics	ccxxxiv
Botany	ccxxxv
Chemical Physics	ccxxxvi
Deductive Logic	ccxxxvii
Inductive Logic and Definition ...	ccxxxix
Qualitative Analysis	ccxli
Hydrostatics and Pneumatics ...	*ibid.*

	Page.
Optics and Astronomy	ccxliii
Chemistry	ccxliv
Theory of Morals	ccxlv
History of Morals	ccxlvii
Mental Philosophy	ccxlix
History of England	ccli
M. A. Degree Examination ... ...ccliii—cccxxxvii	
Branch I.—Chaucer; Spenser, Milton; Addison	ccliii
English Language and Literature ...	cclv
English Prose Composition	cclxiv
Sanskrit: Translation	*ibid.*
Vedantasara	cclxv
Sanskrit: Sakuntala, Mahaviracaritra, Mricchakatika	cclxviii
Sanskrit: Rig-Veda, I, 25—36 ...	cclxxii
Sanskrit: Manu, II, VII, and VIII; Dasakumaracaritra and Meghaduta...	cclxxv
Sanskrit: Composition	cclxxix
Sanskrit: Translation	*ibid.*
Branch II.—Algebra, Theory of Equations and Trigonometry	cclxxxv
Geometry of two and three Dimensions.	cclxxxvi
Newton and Differential Calculus ...	cclxxxviii
Integral Calculus and Differential Equations	ccxc
Statics and Hydrostatics	ccxci
Optics and Astronomy	ccxciii
Dynamics...	ccxcv
Problems	ccxcvii
Pure Mathematics	ccxcviii
Problems	ccc
Mixed Mathematics	ccci
Problems	ccciii

	Page
Branch III.—Physics 1.—[General Principles and Sound.]	cccix
Physics II.—[Light and Heat.] ...	cccv
Physics III.—[Electricity and Magnetism.]	cccvi
Chemistry	cccvii
Practical Chemistry	cccx
Geology	*ibid.*
Mineralogy	cccxi
Palæontology	cccxii
Subject for an Essay	cccxiii
Branch IV.—Structural Botany	*ibid.*
Physiological Botany	*ibid.*
Botany: Development	cccxiv
Botany: Economic, Geographic and Historical	*ibid.*
Zoology	cccxv
Palæontology	cccxvi
Physiology	cccxvii
Comparative Physiology	cccxviii
Animal and Comparative Physiology ...	*ibid.*
Branch V.—Psychology:—Hamilton and Mill	cccxix
Spencer's Principles of Psychology ...	cccxxi
Mill's Logic	cccxxiii
Jevons' Principles of Science ...	cccxxiv
Epictetus and Marcus Aurelius	cccxxvi
Bentham's Ethics	cccxxvii
Political Economy	cccxxix
History	cccxxxii
Constitutional History of England from William III. to 1867	cccxxxiv
Subject of Essay	cccxxxvii
B. L. Degree Examination	cccxxxviii—ccclii
Evidence	cccxxxviii
Contracts	cccxl

	Page.
Torts	cccxli
Criminal Law	cccxliii
Civil and Criminal Procedure Code ...	cccxlvi
Equity Jurisprudence	cccxlviii
Hindu and Muhammadan Law ...	cccxlix
General Jurisprudence	ccccli
M. L. Degree Examination ...	ccccliii—ccclxxvii
Evidence	ccccliii
Contracts	ccclv
Torts and Criminal Law	ccclvi
Hindu and Muhammadan Law ...	ccclix
Real and Personal Property	ccclxii
Civil and Criminal Procedure Code ...	ccclxiii
Equity	ccclxvi
Mercantile and Maritime Law ...	ccclxix
Constitutional History	ccclxxi
Public International Law	ccclxxii
Private International Law	ccclxxiv
Roman Law	ccclxxvii
First L. M. S. Degree Examination ...	ccclxxviii—ccclxxx
Chemistry	ccclxxviii
Materia Medica	*ibid.*
Physiology	ccclxxix
Anatomy	*ibid.*
Second L. M. S. Degree Examination.	ccclxxxi—ccclxxxiii
Medicine	ccclxxxi
Surgery and Ophthalmology ...	*ibid.*
Midwifery, &c.	ccclxxxii
Medical Jurisprudence	ccclxxxii
Hygiene	ccclxxxiii
Preliminary Scientific Examination.	ccclxxxiv—ccclxxxv
Chemistry	ccclxxxiv
Botany	ccclxxxv

	Page.
First M. B. and C. M. Degree Examination	cccLxxxvi—cccLxxxvii
Comparative Anatomy	cccLxxxvi
Materia Medica	*ibid.*
Physiology	cccLxxxvii
Anatomy	*ibid.*
Second M. B. and C. M. Degree Examination	cccLxxxviii—cccxc
Medicine and Pathology	cccLxxxviii
Surgery	*ibid.*
Midwifery, &c.	cccLxxxix
Medical Jurisprudence	*ibid.*
Hygiene	cccxc
Ophthalmic Surgery	*ibid.*
B. C. E. Degree Examination	cccxci—cccciv
Surveying...	cccxci
Surveying and Levelling	cccxcii
Constructive Engineering	cccxciii
Hydraulics	cccxcv
Estimating	cccxcvi
Euclid and Algebra	*ibid.*
Trigonometry and Mensuration ...	cccxcviii
Architectural Drawing	cccxcix
Topographical Drawing...	*ibid.*
Statics and Dynamics	cccc
Hydrostatics and Pneumatics	ccccii

EXAMINERS, 1885-86.

Languages :—

English.....

J. T. Fowler, Esq.
John Bradshaw, M.A., LL.D.
J. Cooling, B.A.
D. M. Cruickshank, M.A.
Rai Bahadur T. Gopala Rau, B.A.
W. F. Grahame, B.A.
Major W. H. Hallett.
A. Monro, M.A., B.C.L.
C. A. Paterson, M.A., LL.B.

Assistant Examiners.

C. M. Barrow, M.A.
W. L. Bower, B.A.
J. H. Bullivant, M.A.
K. Koshi, B.A.
T. T. Logan, B.A.
E. Marsden, B.A.
P. E. Messinier, Esq.
C. Nagoji Rau, B.A.
Rev. W. G. Peel.
J. A. Sharrock, B.A.

Sanskrit.....

G. Oppert, Ph.D.
C. Chandrasekhara Sastriyar, B.A.
S. Venkatarama Sastriyar, B.A.

Assistant Examiner.

T. Sankara Rau, B.A.

Greek and Latin.....	J. W. Foley, M.A. H. L. Fowler, B.A. L. Garthwaite, B.A.
Arabic, Persian & Urdu.	E. Sell, B.D. Hafiz Muhammad Lutfulla Sahib.
Tamil.....	V. Krishnamachariyar. Rev. R. Handmann. M. Seshagiri Sastriyar, M.A. C. W. Tamotharam Pillai, B.A., B.L. P. Vijayaranga Mudaliyar. *Assistant Examiners.* Jacob Gnanavolivu, B.A. T. Ramakrishna Pillai, B.A. T. R. Ramanatha Aiyar, B.A. S. Vijayaraghavachariyar, B A. D. J. Winfred, B.A.
Telugu.....	Y. Venkataramayya Sastri. J. E. Padfield, B.D. P. Srinivasa Rau, B.A. T. Subha Rau, B.A., B.L. C. Venkataramanujarau Nayudu, B.A. *Assistant Examiners.* P. Mangapati Nayudu, B.A. S. Swami Aiyar, B.A.
Kanarese	S. Mangesha Rau, B.A. H. V. Nanjundayya, M.A., B.L.
Malayalam.....	K. P. Sankara Menon, B.A., B.L. Rev. F. Matthissen.
Uriya.....	Babu B. C. Chatterjea. Babu Chaturbhuja Patnaik, B.A.

Mathematics: Pure and Mixed.	P. Ranganatha Mudaliyar, M.A. John Adam, M.A. A. D. dePenneranda, D.D. B. Hanumanta Rau, B.A. Capt. H. D. Love, R.E. E. P. Metcalfe, M.A. W. B. Morren, M.A. G. H. Stuart, M.A. *Assistant Examiners.* Major C. Bowen, R.E. Rev. F. Penny. N. Raghunathachariyar, B.A. S. Satyanathan, M.A., LL.B. L. C. Williams Pillai, B.A. E. Winckler, B.A.
Physics	C. Michie Smith, B.Sc. J. Cook, M.A. H. J. Thompson, Esq. *Assistant Examiners.* M. Rangachariyar, B.A. A. W. Ward, M.A.
Chemistry	Surgeon-Major A. Porter, M.D. Surgeon-Major C. J. McNally, M.D. Surgeon H. K. Fuller, M.B. W. H. Wilson, Ph.D. *Assistant Examiners.* A. Ramalinga Aiyar, M.A. H. N. Read, M.A.
Botany	M. A. Lawson, M.A. J. Cameron, Esq.

Physiology and Zoology...	Surgeon-Major C. Sibthorpe. Surgeon D. F. Dymott, M.B. Surgeon H. Allison, M.D. Surgeon W. O'Hara.
Geology and Palæontology.	R. B. Foote, Esq. A. E. Castle-Stuart Stuart, Esq.
Psychology, Logic and Morals.	Rev. C. Cooper, M.A. D. Duncan, M.A., D.Sc. R. V. Srinivasa Aiyar, B.A. N. Vaidyanatha Aiyar, M.A. *Assistant Examiner.* G. Kodandaramayya, M.A.
History, &c.....	J. B. Bilderbeck, B.A. R. S. Benson, B.A. C. C. Flanagan, M.A. S. Seshayya, B.A. W. Skinner, M.A. C. Sundara Rau, B.A. J. A. Willy, D.D. *Assistant Examiners.* S. Appu Sastriyar, B.A. Henry Croley, Esq. J. S. Huffton, B.A. C. M. Leonard, B.A. P. Rajagopalachariyar, M.A., B.L. Rev. A. Tarbes.
Law.....	J. A. Davies, Esq. S. Gopalachariyar, B.A., B.L. C. Ramachandra Rau Sahib, B.L. H. G. Wedderburn, Esq.

Medicine and Pathology, Materia Medica and Practical Pharmacy, Hygiene.	Surgeon-Major J. J. L. Ratton, M.D. Mrs. Mary Scharlieb, M.B., B.S.
Surgery including Surgical Pathology, Anatomy, Ophthalmology.	Surgeon-Major A. L. Hackett. Surgeon D. S. E. Bain.
Midwifery including diseases of Women and Children.	Surgeon-Major D. R. Thompson, M.D. Surgeon H. Allison, M.D.
Medical Jurisprudence.....	Surgeon-Major S. B. Hunt. N. Jesudasa Pillai, M A., M.D.
Engineering.....	F. B. Hanna, M.A., M.E. J A. Jones, Esq., C.E.

EXAMINATION PAPERS, DECEMBER, 1885.

MATRICULATION.

TUESDAY, 15TH DECEMBER, 10 A.M. TO 1 P.M.

ENGLISH LANGUAGE.

I. Paraphrase:—

As two young bears, in wanton mood,
Forth issuing from a neighbouring wood,
Came where the industrious bees had stored,
In artful cells, their luscious hoard;
O'erjoyed they seized, with eager haste,
Luxurious on the rich repast.
Alarmed at this, the little crew
About their ears vindictive flew.
The beasts unequal to sustain
The unequal combat, quit the plain;
Half blind with rage, and mad with pain,
Their native shelter they regain;
There sat, and now, discreeter grown,
Too late their rashness they bemoan;
And thus by dear experience gain,
That pleasure's ever bought with pain.

II. (*a*) Give the language from which they are derived and the meaning or force,

(1) of the prefixes in *hemisphere*, *malefactor*, *befriend*.

" (2) of the suffixes in *picturesque*, *reddish*, *homeward*.

(*b*) Give the diminutives of *sack*, *animal*, *shade*, *stream*.

III. (*a*) For the italicised words in the following, substitute simple English verbs with an adverb or preposition:—

(1) He *postponed* the payment of the bill for a week.

(2) The boy must be *dismissed* from the school.

(3) The young prodigal soon *squandered* his fortune at which his father was greatly *annoyed*.

(*b*) Give the past tense and perfect participle of the following verbs and also point out which are transitive and which intransitive :—

Lay, lie (down), *rise, raise, fell, fall, sit, set.*

IV. (*a*) Analyse the following passage into clauses. State of what kind each clause is and give its construction.

(*b*) Parse fully the italicised words.

Howe'er it *be*, it seems to me,
'Tis only noble *to be good*.

Kind hearts are more than coronets,
And simple faith than Norman *blood*.

V. Correct the following :—

(1) He told that he was going to Madras but his brother said him he ought not to go.

(2) Unless you do not walk fast, you will not get to school in time.

(3) In spite of my warning they persisted to walk on the edge of the pier.

(4) Is there any so ignorant as not to know this ?

(5) Do what I will I was not able to convince him.

(6) It is very difficult to work these kind of problems.

VI. Write the following extract in the indirect form of narration :—

A gentleman came by and said "What a fine large melon! I think I must buy it. What do you ask for it, my boy ?" "That melon is the last I have, sir; and though it looks very fine, there is an unsound spot on the other side," said the lad turning it over. "So there is," said the gentleman, "I think I'll not take it. But," he added, "is it businesslike to point out the defects of your goods to your customers ?" "Perhaps not, sir; but it's better than being dishonest," said the boy modestly.

VII Make the changes indicated in the passages given below :—

(1) You are supposed to have committed the offence.

Change the verb in the passive voice into the active.

(2) Suddenly the flag went up, the guns went off and the Prince stepped out.

Place each nominative after its verb.

(3) After selling the house, he put the money into the bank.

Use the absolute construction.

VIII. Give the meaning of the following idiomatic expressions :—

(1) His father *set him up in business.*
(2) He was *quite knocked up with his long walk.*
(3) The people are all *up in arms.*
(4) It was *a drawn game.*

IX. (*a*) By constructing short sentences distinguish between (1) *president* and *precedent*, (2) *emigrant* and *immigrant*, (3) *practice* and *practise.*

(*b*) Distinguish between :—

(1) *He forgot to do the exercise*
and
He forgot how to do the exercise.

(2) *This picture is one of my brother*
and
This picture is one of my brother's.

X. Write a description, not exceeding two pages, of any town with which you are acquainted, giving its situation, its natural features, its principal buildings, the chief occupation of its inhabitants and any historical event that may have happened in its neighbourhood.

TUESDAY, 15TH DECEMBER, 2 TO 5 P.M.

ENGLISH: TEXT BOOK.

I. Paraphrase the following passages so as to bring out the full meaning of each :—

(1) Yet why, though fallen her brother's kerne
Beneath De Bourgo's battle stern,

Why lingers she from Erin's host,
So far on Galway's shipwrecked coast?

(2) His broken weapon's shaft surveyed
The king, and careless answer made,—
"My loss may pay my folly's tax;
I've broke my trusty battle-axe."

(3) Awhile with stubborn hardihood,
Their English hearts the strife made good.

(4) I trow
There never yet was soldier born
Could force that passage now.

(5) By a skilful stroke of policy he taught the nobility that trade might be engaged in without losing caste.

II. Give in a few lines of simple prose the substance of the poem "Boadicea."

III. Divide the following lines into feet, and name the kind of feet; mark the accented syllables and point out any peculiarities in the scanning:—

(1) And were I called to prove the assertion true.

(2) Such the bard's prophetic words.

(3) And every rock and every stone.

(4) Even so the Scottish warriors.

IV. Give the meaning of:—

(1) Motley rout, (2) raven locks, (3) wassail revelry, (4) the curse that severed nature's yoke, (5) couchant hound, (6) gentle blood, (7) parted warrior, (8) parting brothers.

V. Name and define the figures of speech used in the following extracts:—

(1) Randolph, thy wreath has lost a rose.

(2) Ah, gentle planet! other sight
Shall greet thee next returning night.

(3) Forth whistling came the grey-goose wing.

(4) What saw the winter moon that night?

VI. (*a*) Give an account of any customs alluded to in the following extracts :—

(1) He, my loved one, bore in field
A meaner *crest upon his shield.*

(2) De Argentine yet bears on high his *red-cross* shield.

(3) And did they *twine the laurel-wreath*
For those who fought so well ?

(*b*) Give an account of the events alluded to in the following extracts :—

(1) And well did Stewart's actions grace
The sire of Scotland's royal race.

(2) All they had marched with great Dundee
To where he fought and fell.

(*c*) Why is Edward II represented as calling Bruce an "audacious traitor" and the Scots "rebels" ?

VII. (*a*) Give an account of (1) the skirmish at St. Florent at the beginning of the insurrection in La Vendée, and (2) the separation of Henri de La Rochejaquelein from the Vendée army.

(*b*) Give, with the names of the persons referred to, the circumstances in regard to which the following extract is used :—

"He stood out for the sword against the arsenic."

VIII. Distinguish between

(1) I have fallen in with you,
and
I have fallen out with you.

(2) Unwilling
and
involuntary.

IX. In the following sentences make the changes noted :—

(1) Nothing but your loyalty and that of a few of my subjects in Britain could make me willing to live. (Begin with "The only thing.")

(2) The King had not in all his dominions a more faithful servant. (Use the positive degree.)

(8) Charette differed in character from the other Vendée heroes (use the noun form of "differed.")

X. Write short notes explanatory of the following extracts :—

(1) They have confessed what kind of broth they have been brewing for you.

(2) He cut a rueful figure.

(3) He would persist in knocking his head against the wall.

(4) Bushy labyrinth.

(5) Telling their beads.

(6) Falling foul of each other.

(7) In the troubling of the waters, many latent scoundrels were stirred up from the bottom.

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M

SANSKRIT: TEXT-BOOKS AND GRAMMAR.

I. Explain the meaning of the following, with full reference to the context:—

(a) विधिनामन्त्रयुक्तेन ऊचापिमथितापिच ।
प्रयच्छतिफलंभूमिररणीवहुताशनम् ॥

(b) उत्तिष्ठमानस्तुपरो नोपेक्ष्यःपथ्यमिच्छता ।
समोहिशिष्टैराचातो वर्त्मन्नावामयःसच ॥

(c) भृत्योभृत्य इत्यनैकान्तिकमेतत् ॥

(d) यत्तवावध्यव्यवसायबाह्यं कुतस्तासांमांसाशनं
यद्रक्षितास्त्वांत्यक्ता यास्यन्ति ॥

(e) स्वातीसागरशुक्तिमध्यपतितं तज्जायते मौक्तिकम् ॥

(f) उत्तिष्ठयत्तिष्ठपतितत्प्रकरोतिलज्जाम् ।
भूमौस्थितस्यपतनाद्भयमेवनास्ति ॥

(g) रामस्यैवंब्रुवाणस्य त्वरितस्ययुयुत्सया ।
प्रजज्वालतदावेदिस्तोपाध्यायपुरोहिता ॥
मदर्भचममस्रुक्का समिन्कुशमोक्षया ।

(h) सिद्धाश्रमपदञ्चेदं भूयःसिद्धतरंकृतम् ॥

II Arrange each of the following in prose order, supplying such words as may be necessary to bring out clearly the full meaning and construction —

(a) अशुद्धप्रकृतौराज्ञि जनतानानुरज्यते ।
यथाशुभ्रसमासन्नः कलहंसःसमाचरेत् ॥

(b) तद्विधज्ञफलंतेन मैथिलेनोक्तमंधनु ।
याचितंनरशार्दूल सुनाभंसर्वदैवतैः ॥

(c) यथागौर्दुह्यतेकाले पाल्यतेचतथाप्रजाः ॥

(d) पश्यलक्ष्मणशीतेषुं मानवंमन्त्रसंहितम् ।
मोहयित्वानयत्येनं नचप्राणैर्वियुज्यते ॥

(e) माभूत्सकालोदुर्मेधः पितरंसत्यवादिनम् ।
नावमन्यस्वधर्मेण स्वयंवरमुपास्महे ॥

III. *(a)* Give the meaning of भाविताऽत्मन्, त्रिविक्रम, शिलोच्चय, शतह्रदा, ऐकमत्य, उद्योत, त्रिपथगा, निर्वाण and अश्वचर्या.

(b) काऽन्यकुब्जमितिख्यातं तदाप्रभृतितत्पुरम् ॥

Relate briefly the story referred to in this verse.

(c) Give the titles of the ten Cantos of Ramayana you have read for this year's Matriculation Examination.

IV. Give the विग्रह or analysis of the following compounds, stating the class to which each of them belongs:— मध्याह्नः, मांसाशिनः, कृतार्थः, यथान्यायम्, दुर्मेधाः, चिराऽत्रम्, पुरुषसिंहः.

V. Give the accusative case of पूषन्, बिभ्रत्, चतुर्, त्रि, पुंस्, प्रत्यच्, दिव्, सखि and श्वन्.

VI. *(a)* Give the feminine bases of the following nouns and adjectives:—काक, अज, लोहित, मानुष, लघुतर, दाढ, एकविंश, हन्यमान, मेधाविन्, कमलाक्ष and युवन्.

(b) Give the comparative and superlative forms of मृदु, स्थूल, अन्तिक, वृद्ध, युवन्.

VII. Combine the following according to the rules of Sandhi, giving the Sandhi rules in the cases marked with an asterisk* .—

(a) कस्मिन्* चित् अधिष्ठाने

(b) वायसदम्पती* अपि

(c) ऊषतुः* रघुनन्दनौ

(d) यत् भवः उपायः अस्ति

(e) समये* उपतिष्ठते

(f) भगवन्* श्रोतु मिच्छामि

VIII. Translate into Sanskrit:

(a) Blind of one eye.

(b) They are husband and wife.

(c) Fruits fell [Perfect (लिट्) of पत् with नि] from the tree.

(d) We have caused thirty-three wells to be dug [aorist (लुङ्) of the causal of खन्] in the village.

(e) Our teachers teach (causal of द्रु with अधि) us poetry thrice a week (a द्विगु compound formed of सप्तन and अहन्)

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

SANSKRIT: TRANSLATION.

I. Translate into English:

(a) अस्ति कस्यचिन्महीपतेः कस्मिंश्चित् स्थाने मनोरमं शयनस्थानम्. तत्र शुक्लतरपटयुगलमध्वसं-

स्थिता मन्दविसर्पिणीनाम श्वेतायूका प्रतिवसतिस्म. सा च तस्य महीपतेरक्तमास्वादयन्ती सुखेन कालं नयमाना तिष्ठति. अन्येद्युश्च तच्छयने क्वचिद्भ्राम्यन्नग्निमुखोनाम मत्कुणः समायातः. अथ तंदृष्ट्वा सा विषण्णवदना प्रोवाच, भो अग्निमुख कुतस्त्वमत्रानुचितस्थाने समायातः. तद्यावन्नकश्चिदेत्ति तावच्छीघ्रं गम्यतामिति.

(b) वायस आह, भद्र! तत्कथय कथं स दुष्टसर्पो बधमुपैष्यति. शृगाल आह, गच्छतु भवान् किञ्चिन्नगरं राजाधिष्ठानम्. तत्र कस्यापि धनिनो राजामात्यादेः प्रमादिनः कनकसूत्रं हारंवा गृहीत्वा तत्कोटरे प्रक्षिप, येन सर्पभक्षणेनवध्यते.

(c) (1) जातमात्रंनयःशत्रुं रोगञ्चप्रशमंनयेत्।
महाबलोऽपितेनैव वृद्धिंप्राप्यसहन्यते॥

(2) दूतःसदैत्यःप्राप्तश्री र्नेतएवार्हतिक्षयम्।
विषवृक्षोपिसंवर्ध्य स्वयञ्छेत्तुमसाम्प्रतम्॥

(3) यादृशैःसेव्यतेभृत्यैर्यादृशांश्चोपसेवते।
कदाचिन्नार्तसंदेहस्तादृक् भवतिपूरुषः॥

(d) (1) अथतौदेशकालज्ञौ राजपुत्रावरिंदमौ ।
कालयुक्तमिदंवाक्य मब्रूतांकौशिकंमुनिम् ॥

(2) अद्यपूर्वंमहाघोरा राक्षसानसमागताः ।
अस्मिन्दिनेमहाघोरं रक्षसामावयो -
र्मृधम् ॥

(3) तेनपापानुबधेन वक्षनंनप्रतीच्छता ॥
एवंब्रुवन्त्यःसर्वाःस्म वायुनोपहृताभृशम्।

(4) अहंहिनियमाद्राम हित्वातांसमुपागतः ।
सिद्धाश्रममनुप्राप्य सिद्धोस्मितवतेजसा ॥

(5) ततोद्वाहंतुराजानं ब्रह्मदत्तंमहीपतिः ।
मदारंप्रेषयामास स्वपुरंपरमार्चितम् ॥
यथान्यायंचगंधर्वी स्वधासाःप्रत्यनन्दत ।
स्पृष्ट्वास्पृष्ट्वाचताःकन्याः कुशनाभंप्रश-
स्यच ॥

(6) निशायांसुप्रभातायां विश्वामित्रोभ्यभाषत।
सुप्रभातानिशाराम पूर्वासंध्याप्रवर्तते ॥

(c) कस्यायमाश्रमःपुण्यः कोन्वस्मिन्वसतेपु -
मान् ।

भगवञ्च्छ्रोतुमिच्छावः परंकौतूहलंहिनो ॥
तयोस्तद्वचनंश्रुत्वा प्रहस्यमुनिपुङ्गवः ।
अब्रवीच्छ्रूयतांराम यस्यायंपूर्व आश्रमः ॥

II. Translate into Sanskrit:

(a) Visvamitra wished to sacrifice. But the Rakshasas prevented him. So he begged Rama and Lakshmana of Dasaratha. Dasaratha did not like to part with his sons. Visvamitra got angry with Dasaratha. Dasaratha then gave his sons to Visvamitra. Dasaratha's two sons watched Visvamitra's sacrifice for six days. They killed the Rakshasas so that Visvamitra completed the sacrifice.

(b) (1) Let the two books be brought here.

(2) There is sweetness in the words (वाच्) of poets.

(3) Those two rivers meet at Prayaga.

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

LATIN: TEXT-BOOKS AND GRAMMAR.

I. Translate into Latin:

(*a*) To daughters. Of talents. A very doubtful matter. A more benevolent man. The eldest son. The twenty-first month. Ninety blows each. For the one or the other.

(*b*) Write down the perfect of gaudeo, consulo, tundo, pallesco;

———— the supine of ĕdo, bibo, volvo;

———— the infinitive of temptum, passus, ortus.

II. Translate the following passages, adding notes on—

the *case* of each word italicised under (i);

the *mood* of each word italicised under (ii);

the *tense* of each word italicised under (iii).

(i) (*a*) Oppida sua omnia incendunt, frumentum omne comburunt, ut *domum* reditionis spe sublata paratiores ad omnia pericula subeunda essent.

(*b*) Reperit Dumnorigem compluros *annos* portoria reliquaque omnia Æduorum vectigalia parvo *pretio* redempta habere, propterea quod illo licente contra liceri audeat nemo.

(*c*) Eorum qui domum redierunt, censu habito, repertus est numerus *milium* C et X.

(*d*) Hic duo rite mero libans carchesia Baccho
Fundit humi, duo *lacte* novo, duo sanguine sacro.

(*e*) *Vobis* lætus ego hoc candentem in litore taurum
Constituam ante aras, *voti* reus

(*f*) Stuppa vomens tardum fumum, lentusque carinas
Est vapor, et toto descendit *corpore* pestis.

(ii) (*a*) Interim cotidie Cæsar Æduos frumentum, quod *essent* publice polliciti, flagitare. Give the etymology of 'cotidie.'

(*b*) Itaque se quod in longiorem diem collaturus *fuisset*, repræsentaturum et proxima nocte de quarta vigilia castra moturum.

(*c*) Quæ tantum *accenderit* ignem
Causa latet, duri magno sed amore dolores
Polluto, notumque, furens quid femina *possit*,
Triste per augurium Teucrorum pectora ducunt.

(iii) (*a*) Non tam præcipites biiugo certamine campum
Corripuere ruuntque effusi carcere currus.

(*b*) Spatia et si plura *supersint*,
Transeat elapsus prior, ambiguumque relinquat.

III Translate into Latin:

(1) He requisitions from the whole province as large a number of soldiers as possible.

(2) He went to the Senate at Rome to seek help. (Do not use *ut*.)

(3) He is said to have taken with him his nine year old son.

(4) I asked him whether he would like to go.

(5) The conqueror takes pity on the miserable Athenians

IV Turn into Oratio Recta·

Cæsar dixit Ariovistum se consulo cupidissime populi Romani amicitiam appetisse: cur hunc tam temere quisquam ab officio discessurum iudicaret? Sibi quidem persuaderi eum neque suam neque populi Romani gratiam repudiaturum.

V. (1) Cæsari cum *id nuntiatum esset*, maturat proficisci. Use another expression for the italicised words, so that "Cæsar" may be the subject.

(2) Caius cum Romam reliquisset tristis erat. Use the passive.

(3) Volo de his rebus, quæ inter nos agi cœptæ neque perfectæ sunt, tecum agere. Turn this into Oratio Obliqua.

VI. Write short explanatory notes on

Clientes; obærati; vergobretus; legatus pro prætore; omnium ordinum centuriones; tribunus militum; militis latus apertum; tumultus.

VII. Explain the allusions in the following passages·—

(*a*) Salve, sancte parens iterum: salvete recepti
Nequiquam cineres, animæque umbræque paternæ.

(*b*) Ut quondam Creta fertur Labyrinthus in alta——

(*c*) Structa meis manibus periuræ mœnia Troiæ.

(*d*) Incertus, Geniumne loci famulumne parentis
Esse putet.

VIII. Parse—Veribus; retexerit; fatus; lebetas; perculit; abiete; traxe; cete.

IX Scan the following lines:—

(i) Levibus huic hamis consertam auroque trilicem
Loricam, quam Demoleo detraxerat ipse
Victor apud rapidum Simoenta sub Ilio alto,
Donat habere viro.

(ii) (*a*) Quote any simile (extending to at least two lines) from Æneid V.

(*b*) "Confidence breeds success." How does Virgil express this?

X Draw a map showing the boundaries of the territory of the Helvetii.

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

LATIN: TRANSLATION.

I Translate into English:

(*a*) Ipsis præcipuos ductoribus addit honores
Victori chlamydem auratam quam plurima circum
Purpura Mæandro duplici Melibœa cucurrit.
Intextusque puer frondosa regius Ida
Velocis iaculo cervus cursuque fatigat,
Acer, anhelanti similis quem præpes ab Ida
Sublimem pedibus rapuit Iovis armiger uncis;
Longævi palmas nequiquam ad sidera tendunt
Custodes, sævitque canum latratus in auras.

(*b*) Olli discurrere pares atque agmina terni
Diductis solvere choris, rursusque vocati
Convertere vias infestaque tela tulere.
Inde alios ineunt cursus aliosque recursus
Adversi spatiis alternosque orbibus orbis
Impediunt pugnæque cient simulacra sub armis;
Et nunc terga fuga nudant, nunc spicula vertunt
Infensi, facta pariter nunc pace feruntur.
Ut quondam Creta fertur Labyrinthus in alta
Parietibus textum cæcis iter, ancipitemque
Mille viis habuisse dolum, qua signa sequendi
Falleret indeprensus et inremeabilis error;
Haud alio Teucrum nati vestigia cursu
Impediunt, texuntque fugas et prœlia ludo.

(*c*) Hic patris Æneæ suspensam blanda vicissim
Gaudia pertemptant mentem: iubet ocius omnis
Attolli malos, intendi brachia velis.

Una omnes fecere pedem, pariterque sinistros,
Nunc dextros solvere sinus; una ardua torquent
Cornua detorquentque; ferunt sua flamina classem.

(*d*) Si quos adversum prœlium et fuga Gallorum commoveret, hos, si quærerent, reperire posse, diuturnitate belli defatigatis Gallis, Ariovistum, quum multos menses castris se ac paludibus tenuisset, neque sui potestatem fecisset, desperantes iam de pugna et dispersos subito adortum, magis ratione et consilio quam virtute vicisse. Cui rationi contra homines barbaros atque imperitos locus fuisset, hac, ne ipsum quidem sperare, nostros exercitus capi posse. Qui suum timorem in rei frumentariæ simulationem angustiasque itineris conferrent, facere arroganter, quum aut de officio imperatoris desperare aut ei præscribere viderentur.

(*e*) Paulatim autem Germanos consuescere Rhenum transire, et in Galliam magnam eorum multitudinem venire, populo Romano periculosum videbat: neque sibi homines feros ac barbaros temperaturos existimabat, quin, quum omnem Galliam occupavissent, ut ante Cimbri Teutonique fecissent, in Provinciam exirent, atque inde in Italiam contenderent, præsertim quum Sequanos a Provincia nostra Rhodanus divideret.

(*f*) Divitiacus multis cum lacrimis Cæsarem complexus obsecrare cœpit, ne quid gravius in fratrem statueret: scire se illa esse vera, nec quenquam ex eo plus quam se doloris capere, propterea quod, quum ipse gratia plurimum domi atque in reliqua Gallia, ille minimum propter adolescentiam posset, per se crevisset; quibus opibus ac nervis, non solum ad minuendam gratiam sed pæne ad perniciem suam uteretur: sese tamen et amore fraterno et existimatione vulgi commoveri.

(Not from the Text-books.)

(*g*) Fame coacta vulpes alta in vinea
Uvam appetebat, summis saliens viribus; "
Quam tangere ut non potuit, discedens ait,
"Nondum matura est, nolo acerbam sumere."

(*h*) Canis, per flumen carnem dum ferret natans
Lympharum in speculo vidit simulacrum suum
Aliamque prædam ab alio ferri putans
Eripere voluit; verum decepta est aviditas
Et quem tenebat ore demisit cibum
Nec quem petebat, adeo potuit attingere.

(*i*) Dum hæc geruntur piratæ omnia maria infestabant ita ut navigatio Romanis toto orbe victoribus sola tuta non esset. Quare id bellum Cn. Pompeio decretum est quod intra paucos menses ingenti felicitate et celeritate confecit. Tigrani deinde bellum intulit; ille se ei dedidit; in castra eius venit, ac diadema suum quum procubuisset ad genua Pompeii, in manibus eius collocavit, quod ei Pompeius reposuit, honorificeque eum habitum regni tamen parte mulctavit et grandi pecunia, quæ Populo Romano daret, quia bellum sine causa Romanis commovisset.

II. Translate into Latin Prose :—

He was present at the sea-fight at Salamis, which took place before he was released from his punishment. This same man was commander of the Athenians at Platææ, in the battle in which Mardonius was routed, and the army of the barbarians was cut off. Nor is there any other illustrious action of his in military affairs besides the record of this command; but there are many instances of his justice, equity and innocence.

WEDNESDAY, 16TH DECEMBER, 10 A.M., TO - ....

ARABIC: TEXT-BOOKS AND GRAMMAR.

I. Give the English of—

(*a*) قَطّ - حرث - فيافي - دفءٌ - ايش - بحراجاج -

جزالشعروالو بر - غليظ القرون - كبش - للبقّ - تيس - ذباب *

(*b*) مهمارايته من الراى افعل - اما نعم مثمرة واصلا -

مربحة - فمضت سنةالا بعض أيام - أن لا ترافقني لا اروح *

II. State the rule for forming the second person imperative of ثلاثي مجرد verbs, and write the second person singular, imperative of—

قال - باع - مد - كرم - ضرب - فتح - اكرم - كرّم -

حمّر - إدهام - بعثر - اقشعرّ *

III. How are the following formed?—

ماضي مجهول - اسم مرت وحالت - نفي جحد *

IV. Write the past and present, both active and passive, of the following verbs:—

البعثرة - الاقشعرار - التكريم - الاكرام *

V. When are the words حيوة - صلوة - زكوة - ربو written with الف as صلات - زكاة - حيات - ربا and when with واو as حيوة - صلوة - زكوة - ربو?

VI. Point out—

(a) the meanings of لِ in each of the following sentences:—

الجنة للمومنين - لله مافي السموات ومافي الارض - رَدِف لكم - لله لا يوخر الاجل - جئتك لاكرامك *

(b) the meanings of بـ in—

ذهب الله بنورهم - اشتريت الفرس بسرجه - بالله لافعلن كذا - ولا تلقوا بايديكم الى التهلكة - كتبت بالعلم - زيد بالبلد *

VII. Define and illustrate—

معرب - مبني - اسم غير المنصرف - حال *

VIII. How do you distinguish between حروف الاصل and حروف الزوائد and name the latter.

IX. Write out—

(a) the particles which give نصب to the subject المبتدا and رفع to the predicate الخبر

(b) the particles which give رفع to the subject المبتدأ and نصب to the predicate الخبر

X. For what letter is ء inserted in the words قائم and بائع? Give the rule.

XI Parse fully the underlined words :—

سأل بعض الملوك وزيره الادب يغلب الطبع ام الطبع يغلب الادب *

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

ARABIC: TRANSLATION.

I. Translate into Arabic :

(a) It is said that Cæsar, king of Syria and Rum, sent an Ambassador to Nushirvan, the king of Persia, who had a lofty palace. When the Ambassador arrived and saw the magnificence of the house, and the pomp with which Nushirvan sat upon the throne, and the number of kings in his service, he examined the palace and saw that some of its sides were crooked. He said to the interpreter, "What is this?" He replied, "That house near is the property of an old woman, who declined to sell it, when this palace was built. The king would not force her to sell it, so he allowed her house to remain at the side of the palace, and this is why you see that it is crooked." The Ambassador said, "By my faith, this crookedness is better than straightness. Such an action has not been recorded of any previous king, nor will any king, in the future, do likewise." Then king Nushirvan was pleased to hear him speak so, and gave him a rich present and sent him away in a happy frame of mind.

(b) (1) Come to-morrow.
(2) What is the price of this book.
(3) Where do you live, and how are you?
(4) Thank God, I am well.
(5) You will never succeed, until you try.

II. Translate into English :

(a) قيل دخل الحسن بن الفضل على بعض الخلفاء وعنده كثير من اهل العلم فاحب ان يتكلم

فزجره الخليفة و قال اصبي يتكلم في هذا المقام ـ فقال يا امير المومنين ان كنت صبيّاً فلست اصغر من هدهد سليمان ولا انت اكبر من سليمان عليه السلام اذ قال أحطتُ بما لم تُحِطْ به ثم قال أَلا تري ان الله تعالي فهم الحكم سليمان ولو كان الامر بالاكبر لكان داود اولي *

قال الجاحظ ما اخجلني احدٌ قطُّ الا امراةٌ عارضتني في الطريق و قالت فيك حاجة فسرت في إثرها و مرّت بي الي صائغ و قالت مثل هذا و مضت ـ فبقيت مبهوتا و سالت الصائغ ـ فقال هذه امراة ارادت اني اعمل لها صورة الشيطان ـ فقلت ما ادري كيف صورته فجاءت بك *

(8) فلمّا خلا الملك ذلك اليوم بوزيره اجتمعت جماعة الانس في مجلس لهم و كانوا سبعين رجلا من بُلدان شتّي فاخذوا يرجمون الظنون ـ فقال قائل منهم قد رايتم و سمعتم ما جري اليوم بيننا و بين هؤلاء عبيد نا من الكلام و الخطاب الطويل ولم ينفصل الحكومة افتدرون اي شيئ راي الملكُ في امرنا فقالوا لا ندري و لكن نَظُنّ انه قد لحق الملك من ذلك ضجر و شغل قلب و انه لا يجلس غدا للحكومة بيننا و بينهم ـ و

قال اخر اظن انه يخلو غدا مع الوزير و يشاوره في امرنا - وقال اخر بل يجمع غداً الحكماء والفقهاء ويشاورهم في امرنا - وقال اخر لاندرى ما الذي يشيرون به في امرنا واظن ان الملك حسن الراي فينا - وقال اخر ولكن اخاف ان الوزير يميل علينا ويحيف في امرنا - وقال اخر امر الوزير سهل يحمل اليه شيئي من الهدايا ليميل جانبه و يحسن رايه فينا - قال - اخر ولكن اخاف من شيئي اخر - قالوا وماهو - قال فتاوي العلماء و حكم القاضي - قالوا هؤلاء امرهم ايضا سهل يحمل اليهم شيئي من التحف والرشوة فيحسن رايهم فينا و يطلبون لنا حيلاً فقهيةً ولا يبالون بتغيير الاحكام بيننا *

الان كما كان - اذا اتاكم كريم قوم فاكرموه - (c)
اذاجاء القضاء عمي البصر - الصمت حكمة وقليل فاعله - الصدقة ترد البلاء وتزيد في العمر - قلة الكلام يستر العيوب - ليس من عادة الكرام سرعة الانتقام *

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

PERSIAN: TEXT-BOOKS AND GRAMMAR.

I. (*a*) Paraphrase:

* سخن انگه کند حکیم آغاز
* یا سر انگشت سوي لقمه دراز
* که زنا گفتنش خلل زاید
* یاز ناخوردنش بجان آید
* لاجرم حکمتش بود گفتار
* خوردنش تندرستي آرد بار

(*b*) Analyse the last بیت

(*c*) Give the تقطیع of the first بیت

II. (*a*) Give the English meanings of—

پشیز - چشمهٔ حیوان - درپوستین خلق افتادن - بحل کردن - بدرقه - اخوان الشیاطین - بربط سرا - لانه - دیباي معلم - طیره کردن - ریسمان دراز کردن - ابن السبیل - مالکان تحریر - عطارد قلم درسیاهی نهادن - مناخ - جو فروش گندم نماي *

(*b*) Explain the following in Persian:—

* گره برسر بند احسان مزن
* که این زرق وشید است وآن مکروفن
* بدو رانش ازکس نیازرد کس
* سبق برد اگر خود همین بود و بس
* اي که شخص منت حقیر نمود
* تا درشتي هنر نه پندارې

* قرص خورشید در سیاهي شد *
* یونس اندر دهان ماهي شد *

(c) Examples of—

مستثنی ـ امرمدامي ـ مبتدا و خبر ـ مجازمرسل ـ واو معدوله ـ مقدر ـ امالہ ـ تشبیہ ـ استعارہ *

(d) A short تذکرہ of Sadi :

(e) The derivations (explaining each part) of—

جنو ـ لاجرم ـ عنقریب ـ درویش ـ بعلبک ـ علٰحدہ ـ معیلان ـ دریوزہ ـ مصطفي ـ نومیدي ـ پیغمبر ـ پرستار *

III State clearly the various meanings of را in—

(a) خُدا را برمن بیدل به بخشای
(b) هرچہ درویشان را است وقف محتاجان است *
(c) زر را دوست بسیار و زردار را دشمن بیشمار *
(d) بزرگي را التماس کردم *
(e) شب را ببوستان با یکي از دوستان اتفاق مبیت افتاد *

IV Give the exact force of the prefixes وا-فرو-فرا-هي-مر-با and of the affixes لا-وش-ویہ-بار-جردہ-دیس-گون-ناک-بن-ینہ *

V. In some editions of the Bostan, in the following couplet, we read خاست instead of وخواست which reading do you prefer, and why ?

* که سلطان ازین روزہ گوئي چہ خواست *
* که افطار او عید طفلان ماست *

VI. Point out the figures of speech صنائع in—

(a) * امین و بد اندیش طشت اند و مور *
* نشاید دروغنه کردن بزور *

(b) * چه مردی کند در صف کارزار *
* که دستش تهی باشد و کارزار *

(c) * طمع کرده بودم که کرمان خورم *
* که ناگه بخوردند کرمان سرم *

(d) * چو درویش بی برگ دیدم درخت *
* قوی باز وان سست و درمانده سخت *

VII. Rewrite the following sentences, as directed :—

(a) In an interrogative form آن اسپ خیلی خوش است

(b) Change پیر لاشه to the nominative case

آن پیر لاشه را که سپردند زیر خاک

(c) Without metaphor ژاله از نرگس فرو بارید وگل را آب داد

(d) As a simple sentence تا رنج نه بری گنج برنداری

VIII. Define and illustrate—

مصدر مقتضب - جمع مکسر - اضمار قبل الذکر
مخفف - مراعات النظیر - تاکید المدح بمایشبه الذم
فوق النقاط - مبالغه *

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

PERSIAN : TRANSLATION.

I. Translate into Persian :

(a) A few days later I met a farmer at a village near Astrakad. I asked him what the revenue of his village was. He

replied, "as much as the Governor can exact." I said how could that be? He rejoined that Persia had no master; irregularity and disorder reigned everywhere. Had Persia had a master, the Russians would not have gained the plain of the Turcomans,—a plain so fertile that one maund of seed gives an outturn of one hundred maunds. He then said that the Turcomans were lucky that they had become subjects of Russia. They would no longer be subject to arbitrary exactions, nor would they experience the tyranny of Persian rulers.

(b) After an hour's ride from the river, they halted to have breakfast, and while tea was being made, the Turcomans amused themselves in chasing some boars. The meal consisted of tea, coarse bread and hard cheese. Spending half an hour over this, they saddled and set off again. Towards midday, the heat became intense, and although the small water-skins which they had filled on the banks of the river Tejend sufficed for themselves, the horses suffered much from thirst. Finding the rainpools along the road dried up, they scattered themselves over the plain, but could not find any traces of wells.

(c) (1) Bring me some rice that is not well boiled
(2) Have you a pair of gloves, or a pair of shoes?
(3) Clear up the rubbish in the garden.
(4) Why do you joke with me?

II. Translate into English:

(a) گر و هي حکما د ربا رگاه کسريل بمصلحتي د ر سخن همي گفتند و بزرجمهر که مهتر ايشان بود خاموش بود سوال کردندش که با ما د ربن بحث چرا سخن نگوئي - گفت و زبرا ن بر مثال اطبا اند و طبيب دا رو ند هد مگر بسقيم - پس چون بينم که راي شما بر صواب است مرا بر سر آن سخن گفتن حکمت نباشد *

مثنوی

* چو کا ري بي فضول من بر آ يد *
* مرا د روي سخن گفتن نشا يد *

* وگر بینم که نا بینا و چاه است *
* اگر خاموش بنشینم گناه است *

مریدي گفت پیري را چه کنم کز خلائق برنج اندرم از بسکه بزیارت من همي آیند و اوقات مرا از تردد ایشان تشویش مي باشد - گفت هرچه درویشانند مرا یشان را وا مي بده و انچه توانگر انند ازیشان چیزي بخواه که دیگر گرد تو نگردند *

دزدي گدائي را گفت شرم نمي نداري از براي جوي سیم دست پیش هر لیئم دراز کردن - گفت * بیت *

* دست دراز از پئي یک حبه سیم *
* بـ که بـ برند بدانگي دو نیم *
* بسر هنگ سلطان چنین گفت زن *
* که خیز ای مبارک در رزق زن *
(b) * برو تا زخوانت نصیبي دهند *
* که فرزند کانت بسختي دراند *
* بگفتا بود مطبخ امروز سرد *
* که سلطان بشب نیّت روزه کرد *
* زن ازنا امیدي سر انداخت پیش *
* همي گفت با خود دل از فاقه ریش *
* که سلطان ازین روزه گوئي چه خواست *
* که افطار او عید طفلان ماست *
* خورنده که خیرش بر آید زدست *
* بـ از صائم الدهر دنیا پرست *

* مسلم کسي را بود روزه داشت *
* که درماندهٔ را دهد نان چاشت *
* وگرنه چه حاجت که زحمت بري *
* زخود بارگيري وهم خود خوري *

(c) شخصي پيش قاضي آمد و گفت اگر خرما خورم خللي دردين باشد گفت نه ـ گفت اگر قدري شو نيزد ران داخل کنم مضائقه هست ـ گفت نه ـ گفت اگر آب برو ريزم حرام شود ـ گفت نه ـ گفت شراب از همين چيزها است چرا حرام است ـ قاضي گفت اگر قدري خاک برسرت ريزم سر ترا الم رسد ـ گفت نه ـ گفت اگر باب بياميزم و بزنم تکليفي دهد ـ گفت نه ـ گفت اگر آن را خمير سازم و خشتي تيّار کنم و برسرت بزنم چگونه باشد ـ گفت بشکند ـ قاضي گفت شراب نيزهمين حکم دارد *

(d) (۱) فنر ساعت من شکسته است (۲) ابن برنج هنوز زنده است (۳) من طبيد عوضي بران قفل انداختم زبان قفل خراب شد (۴) نزدبک آن منزل جلکه بود ـ (۵) نفست بگير و ده برو *

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

URDU: TEXT-BOOKS AND GRAMMAR.

I. اِن الفاظ کے معني انگريزي ميں لکھو *

بيرن - گھر سينا - خاصدان - تکلّف کے چلون - پنڈ چھوڑنا - چارگردے کا گھوڑا - بيٹھے بٹھائے - اوپچي - چھپ تختي - پتا - فارغ خطي - مانجھ دھار - اگيادينا - ماجائي - مجوز هونا - دهاوا مارنا *

II. ا ابيات مرقومة الذيل کي شرح سليس هندوستاني ميں کيجئے *

* وحشي هوں نه تصوير بهي لے راه بياباں *
* ماني سے کهو پاؤں بڈانا نهيں اچها *
* وه هي خالي تو پيٹه خالي وه بهرے تو پيٹه بهرے *
* کاسهٔ عمر عد و حلقهٔ آغوش هوا *
* هوں وه ميکش که نه مستي ميں کهوں راز کبهي *
* لاکهه قلقل کهے شيشه مجهے مي خانے ميں *
* خندهٔ دندان نما سے دو هلال آئے نظر *
* رات مجهه کو شبهٔ شق القمر هونے لگا *
* تار تار پيرهن ميں بس رهي هي بوی دوست *
* مثل تصوير نهالي ميں هوں يا پهلوی دوست *

۲ پهلي بيت کي تقطيع کيجئے *

۳ ابیات مذکور کے عربي فارسي هندي اؤر سنسکرت لفظون کو جدا جدا لکهو *

۴ پهلي بیت کي ترکیب کس طرح هي *

۵ ان الفاظ کا جن پر لکیر هین اصطلاحي نام لکهو *

۶ دوسري بیت مین لفظ وہ اؤر یهه کا مرجع کونسا لفظ هي *

III. ان کو مصدر سے کس طرح اشتقاق کرتے هین *
ماضي - مضارع - متعدي بالواسطه - اسم حالیه - حاصل بالمصدر - اسم ظرف - اسم آله - ماضي تمنائي *

IV. ان کي تعریف معهٔ مثال رقم کرو *
فعل مجهول - مرکب مفید - مفعول له - مرکب توصیفي - تجنیس خطی - قلب - مهمله - جمع مکسر *

V. ا حروف مرقومةالذیل کن اعضا سے استعاره کئے جاتے هین *
ا - س - ص - ل - م - ن *

۲ هر ایک مذکور حرف از روي حساب جمل کے کس عدد کے جاے مین استعمال کئے جاتا هي *

۳ بتلاؤ که اُن حروف مین کؤن سے مذکر اؤر کؤن سے مونث هین *

VI. اگر کسي لفظ کے اخیر حرف کو کسره آوے تو کتنے قسم کا هوگا اؤر کهان بعوض اس کسره کي یي اؤر آتا هي *

VII. بتلاؤ كه مرقومةالذيل الفاظ كو حذف كرنا كبهي جائز هي يا نهين اگر جائز هو تو كب جائز هي *

مبتدا - خبر - حرف رابط - فعل - كو (علامت مفعول) *

VIII. جو حروف كه افادة معني تاكيد - استدراك - استثنا - تشبيه اور تصغير كا كرتے هين ان كي تفصيل معهٔ امثله لكهو *

IX. اردو مين اسم كي جمع هر ايك حالت مين كس طرح بنائي جاتي هي *

X. شعراي ماتحت سے كسي ايك كا تذكره (حال) مجملاً تحرير كرو *

ذوق - مصحفي - ناسخ - مومن - مير - غالب *

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

URDU: TRANSLATION AND COMPOSITION.

I. (*a*) Translate into Urdu:

"You teach," said the Emperor Trajan to a famous Rabbi, "that your God is everywhere, and boast that he resides among your nation. I should like to see him." "God's presence is, indeed, everywhere," the Rabbi replied, "but he cannot be seen; for no mortal eye can look upon his splendour." The Emperor demanded again to see him. "Well," answered the Rabbi, "let us try to gaze at one of his ambassadors." Trajan assented, and the Rabbi, leading him into the open air, for it was the noon, bade him raise his eyes to the sun, then shining down upon the world in all his glory. The Emperor made the attempt but relinquished it. "I cannot," he said, "the light dazzles me." "If then," rejoined the triumphant Rabbi, "thou art unable to endure the light of one

of his creatures, how canst thou expect to behold the unclouded glory of the Creator?"

(*b*) Render into appropriate Urdu:

(1) There is not an unnecessary thing in existence, if we could but understand it. It is astonishing how much we all go about with our eyes open, and yet seeing nothing.

(2) If you do so again, I shall at once go away. Had you done so before, I should then have gone away.

(3) Stop a moment; I won't be long. If we do not make haste, we shall be too late.

(4) It is easier for you to give me good advice than for me to follow it.

II Subject of a short Essay in Urdu:

Supposing a relation or a friend of your own age to come to spend a week with you, describe how you would spend the time, what you would take him to see, and what you would both do.

اگر کوئي ہم عمر قرابت دار یا دوست ایک ہفتے تک تمہاري رفاقت مین رہے تو تم اُس کے ساتھہ کس طرح اوقات بسری کروگے - اوْر کہا کہا دکھاؤگے اوْر تم دونون کہا کروگے *

III. مرقوم الذیل نظم و نثر کا انگریزي مین ترجمہ لکھو *

(*a*) * اولٹے وہ شکوے کرتے ہین اوْر کس ادا کے ساتھہ *
* بے طاقتی کے طعنے ہین عذر و جفا کے ساتھہ *
* بہر عیادت آئے ولیکن قضا کے ساتھہ *
* دم ہي نکل گیا مرا آواز پا کے ساتھہ *
* اس کي گلي کہان ہي یہہ کچھہ باغ خلد ہي *
* کس جاے مجھہ کو چھوڑ گئي موت لا کے ساتھہ *

* مانگا کرینگے اب سے دعا هجر یار کي *
* آخر تو دشنی هي اثر کو دُعا کے ساتهه *
* نهے وعدے سے پهر آنے کے خوش پهه خبر نه تهي *
* هي اپني زندگاني اسي بے وفا کے ساتهه *
* الله رے گمرهي بت و بتخانه چهوڑ کر *
* مومن چلا هي کعبه کو اک پارسا کے ساتهه *

* سخن گوي روشن دل هوشمند *
* پهه کهتا هي زير سپهر بلند *
* هوا پهلے جو کوئي کشور کشا *
* شه داد گستر کیو مرث تها *
* سدا کوه مین تها وه مسکن گزین *
* بجز چرم پوشاک تهی کچهه نهین *
* کیومرث شاه خجسته خصال *
* جهان مین رها حکمران بیس سال *

(b) اس حالت مین تین سال گذرے چوتهے برس ایک سوداگر سیر و سفر کرتا هوا آیا اور هر ایک ملک کے تحفے تحایف عجیب و غریب جهان پناه کے حضور مین لایا - ملازمت حاصل کیا - پادشاه بهت توجه فرمایا اور احوال پرسي اس کي کر کے پوچها که تم بهت ملک دیکهے کهین کوئي حکیم کامل بهي نظر پڑا یا کسو سے مذکور اُس کا سنے - وه التماس کیا که قبلهٔ عالم هندوستان مین دربار کے

بیچ ایک پہاڑي ہي وہان ایک گسائین جٹادھاري
بڑا منڈھب مہا دیو کا اؤر سنگت اؤرباغ بڑی بہار
کا بنایا ہي اس مین رہتا ہي اؤر اس کا یہہ قاعدہ
ہي کہ برسوین دن شیو رات کے روز اپنے استھان سے
نکل کر دریا مین پیرتا ہی اؤر خوشي کرتا ہی -
اشنان کے بعد جب اپنے آسن پر جانے لگتا ہي تب
بیمار و دردمند دیس دیس اؤر ملک ملک کے جو
دور دور سے آتے ہین دروازے پر جمع ہوتے ہین ان
کي بڑي بھیڑ ہوتي ہي - وہ مہنت جسے اس
زمانے کا فلاطون کہا چاہئے قارورہ اؤر نبض دیکھتا ہوا
اؤر ہر ایک کو نسخہ لکھہ کر دیتا ہوا چلا جاتا ہي -
خُدا ایسا دست شفا اس کو دیا ہي کہ دوا پیتے
ہي اثر ہوتا ہي اؤر وہ مرض بالکل جاتا رہتا ہي *

(c) * ربط غیرون سے بڑھا مجھہ سے وفا چاہتے ہو *
* دل مین سمجھو تو یہہ کہا کرتے ہو کیا چاہتے ہو *
* عشوہ و ناز و ادا طعنے سے کہتے ہین مجھے *
* ایک دل رکھتے ہو کس کس کو دیا چاہتے ہو *

خُدا کي خلقت مین ہزارہا مخلوق ہین کہ جن کي
حقیقت فقط علم کے ذریعے سے معلوم ہوتي ہي - جو لوگ
تحصیل علم مین کوشش اؤر سعی کرینگے تو حقیقت حال
دریافت ہوگي - خلقت کے معنے اشیاي موجودہ ہین -
مثلاً اِنسان - چرند - پرند - درخت - خاک - باد - آب

آتش وغیرہ ۔ قدیم حکما کے نزدیک خُدا پہلے بنیاد خلقت یعنے چار عناصر خاک ۔ باد ۔ آب ۔ آتش پیدا کیا اوُر انہین سے تمام خلقت کو موجود کیا اگر خیال کردیکھو تو مخلوقات تین نوع پر منقسم ہین اوُر اِسي لئے ان کو موالید ثلثہ کہتے ہین *

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

TAMIL: TEXT-BOOKS AND GRAMMAR.

I. (a) அரிச்சந்திரன் கதையைச் சுருக்கி ஒரு பக்கத்திற் கதிகப்படாமல் எழுதுக.

(b) அரிச்சந்திர வெண்பா நூலாசிரியர் எச்சமயத்த வர்? அது எதனால் ஊகிக்கப்படக்கூடியது?

(c) பாரதயுத்தத்தில் இருகக்ஷியார் யாவர்? அவர்க ளுடைய பெயர்கள் அவர்களுக் கேதுகாரணத் தா லமைந்தன?

(d) துரோணபருவத்தி லடங்கியிருக்கும் விஷய மென் ன?

(e) பாரதத்தைத் தமிழில் விருத்தப்பாவாகப் பாடி னவர்கள் யார்?

II. அடியில் வருஞ் செய்யுட்களுக்குப் பதவுரைப்புணர் யெழுதுக :—

(a) தெரிட்டகடலுலகம் யாம்காவல் சூழ்ந்தவன்று
தொட்டிக்கரவின்றித் தோய்ந்தனினோ - மட்
டவிழ்தார்க்
கூழைமட மானென்றெம் மாவிகள்ளங் கொண்
டதுதான்
ஏழைமையே மாண வெமக்கு.

(b) காசினியெல்லாம் புகுந்து கண்டனம்பல் வேந்தர் தமைப்

பாசிழையாள் பாகனல்க நீபயந்த - கேசரங்கள்,
ந்ன்றவிழ்தார் நங்கைக்கு நண்பனவனலதில்,
என்றருளிச்செய்தா ரொடுத்து.

(c) காலனேயன்ன கடற்படைஞர் தம்மேலே
பாலனேசெல்லப் படைவிடுத்தாய் - ஏலம்
சூதலேவாய் நாறுங் குருநாடர் கோவே
மதலேயாய் வாழுதியோ மற்று.

III. (a) மேற்பாட்டுகளில் முதற்பாட்டில் தொட்ட, காவல், கரவு, என்பனவற்றிற் கிலக்கணங் கூறுக.

(b) "தொட்டகடல்" என்று சொலலப்பட்டதற்குக் காரணத்தைச் சுருக்கமாக எழுதுக.

(c) இரண்டாவது பாட்டில் "காசினி" என்றலென்ன? அதற்கப்பெயர் எக்காரணத்தாலுண்டாயிற்று?

(d) "பாசிழை" என்பதற்கு நன்னூற் சூத்திரத்தோடு இலக்கணங் கூறுக.

(e) "பாசிழையாள் பாகன்" யார்? அருளிச்செய்தது யார்?

(f) மூன்றாவது பாட்டு யாரால் சொல்லப்பட்டது?

(g) பூட்டிவிடுத்தது யார்? பாலன் யார்?

(h) அப்பாட்டிலுள்ள ஏ - ஓ - இடைச்சொற்களே யெடுத்தெழுதி, அவற்றின் பொருள்களைத் தெரிவிக்க.

IV. (a) "அறுதொழிலோர்" யார்? அறுதொழில்கள் யாவை?

(b) "பார்த்தன்" என்பது யாருக்குப் பெயர்? அப்பெயர் அவனுக்கெப்படி வந்தது?

(c) தானவர், திரிகர்த்தன், மச்சர்கோன், திரிசங்கு, இவர் யார்?

V. அடியில்வரும் பதங்களுக் கர்த்தமெழுதுக :—
மானினி, பாற்றினம், பாடலற்று, அலைபுழுவை, அடி சரம், மூனிவேந்தர், காலசக்கரம், மறநெறி.

VI. (a) "மென்மேல்" என்பது என்ன தொடர்? இது போன்ற வேறு உதாரணமொன்று காட்டுக.

(b) "ஆ" யீறு எதெதைக்காட்டும்? கன்னூற் சூத்திரத்தோடு தெரிவிக்க.

(c) முற்றுவினையைப்போல் நிற்கு மெச்சம், விகுதி காலங்காட்டும் எச்சம், விளிவேற்றுமை :— இவைகட்கு உதாரணம் எழுதுக.

(d) ஏவலுக்கும் வியங்கோளுக்கும் இலக்கண பேத மென்ன? ஒவ்வொன்றுக்கும் இவ்விரண்டுதாரண மெழுதுக.

VII. (a) என்ன பயனைக்கருதி பஞ்ச தந்திரக்கதை எழுதப் பட்டது?

(b) சமுத்திரஞ் சிட்டுக்குருவியினு லவமான மடைந்த கதையைச் சுருக்கமா யெழுதுக.

VIII. (a) பின்வரும் பதங்களுக் கர்த்தமெழுதுக :—
சித்திரக்கிரீவன், பிங்களன், சூடாகர்ணன், தமனகன், சரற்கவன், இரணியுஞ்சு..

(b) இப்பதங்கள் பஞ்ச தந்திரத்தில் எவ்வெவர்களுக்குப் பெயராக வழங்கப்பட்டிருக்கின்றன?

IX. பின் வரும் பதங்களுக்குப் பொருளென்ன :—
ஆற்றல், இதாகிதம், சேரங்கை, பற்றுள்ளவன், சாந்திராயணம், திரிகூடம், தினமானம், வேட்டல், ஆதித்தியம், திருப்பணி.

X. அடியில் வரும் மூன்று தனி வாக்கியங்களையும் பொருள் கெடாமல் பொருத்தச்சேர்த்து ஒரே தொடர் பாக வெழுதுக :—

"கல்விப்பொருளினுஞ் செல்வப்பொருளிலும் குறை வில்லாதவர்களுக் குறைவிடமாகி யிருக்கிற பாடலிபுரமெ

ன்னும் ஒரு பட்டணமுண்டு. அந்தப் பட்டணத்திற் சகல' குணங்களோடுங் கூடியிருக்கிற சுதரிசனனென் னும் அரச னொருவனிருந்தான். அந்த அரசன் தன் பிள்ளைகள் படியாமல் மூடர்களா யிருக்கின்றதைக் கண்டு வெகு வியசனத்தோடு மாலோசிக்கத் தொடங்கி னன்."

XI. பின்வரும் வாக்கியங்களிலுள்ள எல்லாவகைப் பிழை களையும் திருத்திச் சரியா யெழுதுக :—

(1) யெமுனைநதி பாய்ச்சப் பெத்திறுக்கும் வொறு னகறத்தில் அறசாகூடி செய்துக்கொண்டிறுந்த கன்காதறன் எனும் அறசன் காலத்தில் தொகப் பனும் புள்ளையுமாகிய சொணையில்லாத யிரெண் டு மூடற்கள் வொறுஞள் ரூத்திறி வொறுவறுக் கொறுவற் சண்டை யுண்டாச்சுது.

(2) தன் ஊட்டு வெளக்கென்னு முற்றிட்டா, தெப் பாமல் சுடும்.

(3) னல்லவற்கு வொறுதிரம் செய்ஞ்ச உற்ருசை மரவப்படாது.

(4) ஆமே கணத்திலே, அணைப்புள்ளை களையிலேயுஞ் கண்டுகக்கூடும்.

(5) ஆத்திலே வொறுகாலும் சேத்திலே யொறுகாலு மாகிருக்குரான்.

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

TAMIL: TRANSLATION AND COMPOSITION.

I. Translate into Tamil :—[See Urdu Translation paper, p. xxxvi].

II. Subject of a short Essay in Tamil—

Supposing a relation or a friend of your own age to come to spend a week with you, describe how you would spend the time, what you would take him to see, and what you would both do.

வயதில் உன்னீடிள்ள நேசன் ஒருவன் ஒருவாரம் உன்னுடன் இருந்து காலங் கழிக்கும்படி வருவானுகில், நீ அந்த வாரமூல

தை எப்படி கழிப்பாய்? அவனை யழைத்துக்கொண்டு சென்று எந்தெந்த விநோதங்களைக் காட்டுவாய்? நீங்களிருவரும் என்னென்ன செய்வீர்கள்? [இதையெல்லாம் சொறபிழையில்லாமல் எழுதுக.]

III. Translate into English—

A. ராஜாக்களுக் கொருவராலும் பலனில்லாவிட்டாலும் ஒருவேளை சிறு தரும்பும் பல்லுக்குத்த உதவும்; மற்றவைக்குக் கேட்பானேன். மேலு மொருவேளை அரசர்கள் குணவானை யசட்டைபண்ணித் தள்ளிவிட்டாலும், அவன் சற்குணம் போய்விடுமா? நெருப்பைத் தலைகீழாகப் பிடித்தாலும் அதன் சுவாலை கீழாகுமா? ஆதலால் அரசர்கள் பரிசோதித்தறிந்து யோக்கியனை நல்லகாரியத்தில் வைத்தால் அவன் ராஜாவுக்குக் கீர்த்தியைப் பெருகப்பண்ணுவான். ஆகையால் என்னைத் தாங்கள் சிறு ரரி யென்றவமானம் பண்ணலாகாது. ரூபத்தைப் பாராமற் குணத்தைப் பார்க்கவேண்டும். மலைபோலிருக்கிற தேர் சிறு சுள்ளாணியால் நிலைபெறும். நாலே சுவாமிகாரியத்திற் பற்றுளளவன்; கருவியுங் காலமுமறிந்து கருமமுடிக்கு மாற்றலுள்ளவன்; இந்த வல்லமையெல்லாம் உமது சார்பிருந்தாற பிரகாசிக்கும். வாள்முதலிய வாயுதங்களும், வீணை முதலிய வாத்தியங்களும், பூமியும் ஸ்திரீகளும் யோக்கியாகளும் சாஸ்திரங்களுமாகிய விவையெல்லாம் பரிபாலனம் பண்ணுகிறவர்களாற் பிரகாசிக்கும். அண்டையிற் சமர்த்தனில்லாத ராஜாவுக் கபகீர்த்திவரும்.

B. (1) எல்லார்க்கு மெண்ணு மெழுத்து மீனுமிவ்விரண்டாம்
எல்லாரு நோக்குமியற் கேள்வி எனச் - சொல்லாரும்
காதமிருத்தலினுற் கண்ணில்லார் காதில்லார்
ஒத வொருவாங்குண்டோ.

(2) மன்னர் பொருதழிய மண்டலங்க ளெண்டிசையும்
அன்னபரி சென்றறியாமுன் - மன்னு

புணரியின்மேல் வந்துதித்த பொற்கதிரோன மே
லைப்
புணரியின்மேற் புக்கானப்போது."

IV Render into appropriate English—

(1) எவன் புத்திமானோ அவனே பலவான்; புத்தி முற றினவர்களுக்குச் சித்தியாதது ஒன்றுண்டா?

(2) தாழ்ந்து நிற்பவர் வாழ்ந்து நிற்பார், குனிந்த புல் பிழைக்கும்; காய்த்தமரம் வளைந்து நிற்கும்; வ ணங்காதது உயிர் போக்கடிச்கும்.

(3) கதைமுடிந்து முடியாதுமாயிருக்கக் கவிராயன எ ழுந்து போகலாமா?

(4) பூமியைக காவல் பரதன்கொண்டு ஆளட்டும்; போனது போகட்டும்; ராமனை ஊரைவிட் டேன போகச்சொல் என்கிறாய்?

(5) கையிலே வெண்ணெய் இருக்க நெய்க்கு அழுவா னேன்?

(6) உள்ளது சொல்ல ஊரும் அல்ல, நல்லது சொல்ல நாடும் அல்ல.

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

TELUGU: TEXT-BOOKS AND GRAMMAR.

I. (a) ధర్మతనూజుండు ధర్ముపుఁదప్పిన, ధరణీతలంబెల్లఁ దల్ల
డిల్లు
దగిలినుహృమ్యాత ధర్మయుద్ధంబులఁ బరులచేఁబిలు
వంగఁబడి విభుండు
కడఁగక విముఖుండుగాఁజనదని శుభక్షాత్ర ధర్మంబు
లోకంబులందు
నిలిపెఁదానిది పతినేరమియె దైవవైపరీత్యంబయినవ
గవనగునె.

(b) గురులధర్మవరులఁ గోపించి ధీరుల
తిక్కనింతురే త్వదీయనిత్య
ధర్మగౌరవంబధార్మికులగుచున్న
పరులచేతఁజెఱుపఁ బడియెనిట్లు.

(c) కనకోర్వీధర సానుసారరుచి మద్బ్రాండీవ నిర్ముక్తశ
స్త్రనిపీతారుణ వారిశేషములు.

(d) తీరతరు స్థితకీరశారికా ముఖశకునకులకల కలధ్వానం
బులు.

(e) ఆప్పలమునింగి భంగసంగుతుండైయున్నవాడు.

(f) విమలగుణ రత్నాకరయయ్య శతారధారా పాతంబు
నందాఱు గురునరయనేరనియుమయో.

(1) పైవానికి దండాన్వయము వ్రాయుఁడు.

(2) 'నిలిచె,' 'ఆగునై,' వీనికిఁ గర్తలను, 'ఆని' దీనికిఁ గర్త కర్మలను చెల్పుఁడు.

(3) "చెఱుపఁబడియె" దీనిఁ గర్తృనిర్థముగఁ బ్రయో
గించి వాక్యమును మరలఁ వ్రాయునది.

(4) "'నేరమియె" ఇటనంత్య ఏకారమున్నకర్థమేమి?

(5) విముఖుండు, అభిముఖుండు, ప్రభుముఖుండు. వీని
కిఁగల భేదమేమి?

(6) (a), (b) లు ఎవరు, ఎవరితో నసునని?

(7) (a), (b), (c) లు ఏ పద్యములోఁ జెప్పి, వాని లక్ష
ణములువ్రాసి, ఫలైన నొక పాదమందలి గణ
విభజనముఁజేసి, యతులఁ బూపునది.

(8) (c), (d) లకు విగ్రహముల్వ్రాసి వానియందలి స
మాసవదుల నుడుపునది.

II (1) శిశుపాలుఁడు కృష్ణునియందును భీష్మునియందును ఆరో పించిన దోషము లేయవి ?

(2) దుర్యోధనుఁడు సభాప్రభావమునకు లజ్జితుండై మరల గృహమున కేగునపుడును ద్రౌపది దుశ్శాసనాప కృష్టయైసభకు వచ్చునపుడును వేనితోఁ బోల్పఁ బడిరి.

(3) విశ్వామిత్ర శిష్యుఁడు వసిష్ఠునడిగిన మూడు ప్రశ్న లెవ్వి ? హానిలో చేనికైన మీకుఁ దెలిసిన యుత్త రమును వ్రాయునది.

(4) అంగిలేయ రాజ్యాంగములు మూఁడునెవ్వి ? ఆవి పర స్వర సాపేక్షము లెట్లు ?

(5) ముక్తిదాయకములగు నగరము లేడింటిని బేర్కొనునది.

(6) "మణిమాలిక" ఇది యెట్లు అన్వర్థ నామధేయమాయె ?

(7) పుంచాంగంబు లెయ్యవి ?

III (a) వలయు నన్నఁజలపట్టి జలరాశింబొత్తు.

(b) సాకర్యభాతి సుర్వర నుద్ధరింపఁజాలుదు.

(c) రాచవురుపులంగన్న నేచి పీచంబడంతు.

వీనిచే స్ఫురించుఁ బురాతనగాథలఁ దెల్పునది.

IV. (a) చాతీపీతమకా చక్కిలిగింతలు.

(b) ఈనఁగాచి నక్కలపాలు చేసినట్లు.

(c) చల్లకువచ్చి ముంతదాప వచ్చునెట్లు.

(d) విధి విరచితమయిన యపూర్వ జలధిచర దుర్విధై.

ఇవి యే సందర్భమునఁ జెప్పఁబడినవి ? వీని కర్థమేమి ?

V. (1) బుద్ధి - మనము - పురుషుండు - ప్రకృతి - యోగనిష్ఠ - వీనియర్థముల విశదీకరించి,

(2) చెలువ - చెలువము; నేరిమి - నేరమి; వెఱపు - వెఱగు; ప్రియము - పథ్యము; తరి - దరి; కిరి - గిరి. వీని భేదములఁ చెల్పునది.

(3) దురోదరము - ఏనుమడుంగులు - సపత్నులు - ప్రబ్బికోలు - ఎక్కటి - బాళి-బాఁతి - బొమిడికము - లేలిహానము - నెంజిలి - వమ్ము - అంతకక్షయము వీని కర్థములు వ్రాయుఁడు.

VI. (1) కట్టెదుర - విరిబోడి - పేర్మి - ప్రోవు - ఉద్భవిల్లు - కలుములు - నేర్తురు - రప్పించు.

వ్యాకరణ సూత్రములవ్రాయుచు వీని రూపనిష్పత్తి చేయుఁడు.

(2) రాష్ట్రంబు వలనఁబాపి

పేరోలగంబున్న

వానిసౌకుమార్య సౌందర్యములకు నోటువడి

అధికులయిన వారితో.

ఈ విభక్తు లేసూత్రములప్రకారము వచ్చినవి.

(3) 'ధవళాక్షి' ఇట 'అక్ష' శబ్దమునకు మాఱుగా 'నేత్ర' శబ్దము ప్రయోగించునది.

VII (1) ద్యూతము - యజ్ఞము - భంగము - సంజ్ఞ - ఆజ్ఞ వీని తద్భవముల వ్రాయుఁడు.

(2) త్రైశంకపుఁడు - వాచంయముండు - పరంతపుండు - ఆపగసమవరి - దుస్తరము - హవ్యవహుఁడు - యుధిష్ఠురుఁడు - వీని యవయవార్థముల వ్రాయఁదగు.

(3) పాలకడలి - నిక్కు వీనులఁజక్కి - పోరి పొవయోడ - జమిలి ముక్కాలిబారులు, వెలిదీవి. వీనికి సరియగు తత్సమ పదముల వ్రాయంజను.

VIII. ఈ క్రింది వాక్యములఁ దిది మరల వ్రాయుఁడు.

(1) నీవు యీరోజు మన యింటికొచ్చ్యావా నేను లేవు మింటికి రావడాన్కి.

(2) నేను ప్యాసైనట్టు తెలిశి ఖులాసాగా వీధులంతాషికారు కొట్ట్యాను.

(3) చూస్తేవానికి మతిపోతుందేమో అనిపిస్తుంది.

IX. దేశాటన మేరికిఁగాని కర్తవ్యమును విషయమున లార్డు బేకన్ - లార్డు లిటిట్టన్ షేక్స్పియర్ వీరల యభిప్రాయమును దెల్పి వలయు. మఱియు మన యాచారములలో వేనివలనఁగూడ మన పూర్వుల యభిప్రాయమును ఇదియ అని యూహా పుట్టుచున్నది.

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

TELUGU: TRANSLATION AND COMPOSITION.

I. Translate into Telugu—[See Urdu Translation paper, p. xxxvi].

II. Subject of a short Essay in Telugu:

Supposing a relation or a friend of your own age to come to spend a week with you, describe how you would spend the time, what you would take him to see, and what you would both do.

(నీకు సమాన వయస్కుఁడైన బంధువుగాని స్నేహితుఁడుఁ గాని నీతో నెక్కవారము దినములుండుటకు వచ్చినయడల నీవాది నములనెటులఁ గడపెదవో ఏ వింతలఁ జూపుటకు నీవు వానిని వెంటఁ బెట్టుకొని పోవుదువో మీరిద్దఱుఁగూడి యేమిచేయుదురో వివరించి వ్రాయుము.)

III. Translate into English

(1) వారణాసియందు ధావకమల్లుఁడను చాకివాఁడుగలఁడు - ఒకనాఁడు - వాఁడు మిగుల బట్టలుగుంజిన బడలికచేత మయిమఱచి గుఱుపెట్టి, నిద్రఁబోవుచుండెను - ఆ న

డికిరేయి వాని యిల్లొక దొంగచొచ్చెను - అప్పుడు వాని యింటివాకిటఁ గాలిబందముతో గాడిదె నిలుచుండెను - అయింటి కావలికుక్క దాపునఁగూర్చుండి చూచుచుండెను - అవి యొండొంటితో - లోనికి దొంగచొచ్చినాఁడు చూచితివా? చూచితిఁజూచితి - మఱియేల మొఱుగవు? నావని విచారింవ నీకేమినిమిత్తము - మన దొరయిల్లు దొద్దవోఁగా నెప్పరికింపవచ్చునా? నీవే మెఱుఁగుదువు - రాత్రిందివము నిమిషమాత్రమయినఁ బ్రమాదపడక తలవాకిలి వదలక యిల్లు గాచుకొని యుండుదును - ఆ వంతయయిన నావలని ప్రయోజన మెఱుఁగక యేలిక నాయందు సాకతములేక యున్నాఁడు కాఁబట్టి కూడు కమికెఁడయిన దొరకుటకఱవయ్యె పాటెఱుఁగని దొరను సేవించుటకంటె మిన్నకుంట మేలు.

(2) ఓయి కుమారశేఖరా! నీచే నలంకృతంబగు నన్వయం బెయ్యది? నిన్నుఁగన్న సంపన్నులెవ్వరు? నీపేరేది? ఉరెద్ది? ఈ రాకకుఁ గతంబేయది? ఇందుండి యెందులకుఁబోక. నాకడ నెద్దియుదాఁపక తెలుపవలయునని మందలించుటయు నా రాజనందనుండిట్లనియె. ఈలోకంబున నిజంబ వలుకువారును, పలికినదియె నిజంబని నమ్మువారు నెవరు? కొన్నియెడల నిజంబె బొంకగు. బొంకు నిజంబగు. కావుననే నిజంబకా నాయుదంతం బాద్యంతంబు విన్నవించెద. సాదరంబుగ విన నవధరింపుఁడు ఇయ్యిలం బేరెన్నిక గన్న రత్నాకరపురంబు మాకాఁపురంబు. నే రాజాన్వయ సంభవుండ. కాశ్యపగోత్రుండ. వెన్నెలగంటివారు మాయిం

టిపేరు. నాపేరు శ్రీపతి. నాకుఁ దలిదండ్రులు గలరు గాని వారి ప్రోవునేఁ బ్రాపింప, దైవికంబునం బ్రాప్తం బైన కలిమి బలములంజేసి నాయంతనేఁ బెరిగినాఁడ.

(3) పెద్దలుహీనతఁబొందిరి।
తద్దయుహీనులుసమృద్ధి - దనరిరినియమం।
బెద్దివిధియోగ మునకను।
హృద్దర్పోన్నతులఁజూచి - యెట్లుసహింతుఁ॥

(4) అల్పుఁడయ్యుమనుజుఁ - డతివరాక్రమమున।
బేర్మిఁదరతరంబు - పెఱుగుచున్న।
వాఁడుమ్రాని మొదలి - వల్మీకమామ్రానిఁ।
జెరుచునట్లుగడఁగి - చెరుచుఁబరుల॥

(5) ఖలుఁడీదుర్యోధనుఁడె।
గ్గులతోడనెయుద్భవిల్లె - గోమాయురుతం।
బులుసెలఁగెదుర్నిమిత్తం।
బులుపెక్కులువుట్టెవీని - పుట్టినవేళఁ॥

(6) ఎల్లవారునెఱుఁగ - నొల్లనిధర్మువు।
బేలనీకుఁజెప్ప - నేలవలసెఁ।
జిఱుతవానికింత - గఱువతనంబిది।
సన్నెవృద్ధజనము - లున్నచోట।

(7) (a) పిల్లికిఁ జెల్లాట మెలుకకుఁ బ్రాణసంకటము
(b) ఆహా! న్యాయ మచట నెంత కుదురు పఱుపఁబడి యున్నది?
(c) అందలి రాజవంశము రత్నఖనివలె రాజిలుచుండును.
(d) మహత్సేవాం ద్వారమా హుర్విముక్తే.
(e) ప్రారబ్ధ ముత్తమ గుణాన పరిత్యజంతి.

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

KANARESE: TEXT-BOOKS AND GRAMMAR.

I. (a) గంగాపులినే స్థలదోళ్
సంగత కౌముదిమోళిందు సంసారశోయం
ఓంగలు శివశివ యేనుతల
భంగాశృగళింద ననేసబల్లేను తనువం.

(b) లిశిమతమానవేంబ ముడియంకడియల్సు సమర్థమాగి
దు
ర్లభగుణ పద్మసంతకిగే రాజిపజంద్రికేయాగి స
ద్భశః
ప్రభవద లజ్జేయేందేనిపబళ్ళిగే ఘోరకురారమాగి తృ
ప్తిభజిసదిపుదు

(c) సతతపు శంఖుశిర్షవను సార్దవనుంసరలౌషధిశ్వరం
శతకిషగన్వితం సుధియసంగ్రమా గిరునాదడంతదిర
యతకిని శాధినాయకన యక్ష్మవమాణిసలారదిపర్ వీ
రుతవిధిదు ర్విపాకవన దావనుధాటిసే శక్తనాదపం,

ఈ పద్యగళ లర్థవన్ను విశదవాగి బరేయువదు.

1. మేలిన (a), (c) పద్యగళల్లి 'ఎందు ననేసబల్లేను'?
'లావనుశక్తనాదపం?'
ఎంబప్రశ్నేగళ భావార్థవేను?

2. (b) పద్యద విషయవ్యావదు?

3. (c) పద్యదల్లి 'శతకిషగన్వితం' ఎంబల్లి యావ
లిలంకార?

II. ఇల్లిశాచోన్న తను కేశవనునిద్రిసువ
నిల్లితద్వృరిగళ్రాక్షసరు వర్కిసువ

రిల్లిశరణవబేడి బంద పర్వకపజ్ క్తినేలేగొండు బేళ
గుకిడుదూ.

ఇల్లి అందరేల్లి? ఇదు యావ విఱారదల్లి ఓళిదశ్లోక?
ఇదరల్లి సూజేకవాద కధేగళన్ను సూక్ష్మవాగి కిళిసబేకు.

III. (a) లూదిమోళుధిర్ఘమంక్య దోళధికలఘువు
మాదిమోళులఘు వంకదోళధికదిర్ఘ
మప్పపవలిన పూర్వపరార్ధకిన్న
ఛామియంకే దురాత్మసజ్జనరమ్మెక్రి.

ఇదక్కి తాత్పర్యవేను?

(b) లూ పట్టణదల్లి బొమ్మంగేయుం తప్పుగళంకిద్ధి కోరలుళ్ళ శ్రోక్రియరుం జామదగ్న్యనం ధురదిలేక్కిసద బాడుజరుం కుబేరనం పళివడురదరుం ఉక్తమవర్ణిగళం సేవిపశూద్రియం నేరదిరువరు.

ఇల్లి శ్రోక్రియాదిగళిగే ఓళిరువ విశేషణగళు అవరల్లి ఉక్కృష్టకేయన్ను ఠ్యాగే కోరిసుక్తవేమో అదన్ను బరేయబేకు

IV. (a) ధర్మవర్మ జరికేయల్లి మూరునీకిగళు బోధకవాగుక్తవేమేందు ఓళిచే అవుగళన్ను బరేయువదు.

(b) కాయిగే సమానరాచ్చేదుమందియుర్యారు?

(c) 'మంక్రదింద మావినకాయిగళుదురువవే?

ఈ గాదిగే అర్థవేను? ఇదు యారు యావసందర్భదల్లి ఓళిద్దు?

(d) పుణ్యమూర్తి యన్వర్థనామ నందరర్థవేను?

V. కేళగే బరదిరువవుగళల్లి అర్థవ్యత్యాసమాడచే అల్లల్లి సూజిసిరున బదలావణేగళన్ను మాడబేకు. (అవశ్యకవిల్లచే ఇరువ బదలావణే యావదేన్ను మాడకూడదు.)

(a) లింజేగళ పద్మినీవన
సంజారవ ఝరిసేకుపిక జలజజశక్తం
మింజేద పాల్నీరుగళం
పంజువ కేర్కియ ఝరిసబల్లనే పవణం

గుర్తుమాడిరువ పదగళిగే సులభవాద ప్రతిపదగళన్ను పయోగిసి ఊసకన్నడ వజనరూపవాగి బరేయువదు.

(b) సుద్దియన్ను నావరియేవు.

సుద్దియ ప్రథమావిభక్తియన్ను పయోగిసువదు.

(c) లూళువవను ఈ ఝదనేవం కిళిదరే భయగ్రస్తనాగువను.

కిళిసు క్రియేయన్ను భయప్ర - విభక్తియన్ను ప్రయోగిసబేకు.

(d) నానుబరువాగ్యే రోధనధ్వనియొందు కేళల్పట్టితు.

కర్త్రర్థకరూపవాగి (active voice) బరేయకక్కుద్దు.

(e) సావకాశమాడదే అదన్ను కత్తియింద కత్తరిసిదను.

కర్మణ్యర్థకరూపవాగి (passive voice) బరేయువదు.

(f) లింకఃపురద్రోఁఝవేష్టుమాత్రవూ ఝానితారదే ఝోగలారదు.

నిషేధరూపవన్ను బిట్టు బరు ధాతువన్ను పయోగిసబేకు.

VI. (a) పూగొంజేల నొల్దీర మ
నోగకియుళ్ళవన వృత్తి నోడల్కేరడే
శాగం ... ...

ధీరమనోగకియుళ్ళవన వృత్తియ యేరడు శాగగళ్ళావవు?

(b) కడలుకొరేనీర్గళం ఘటమీకమానదిగొళ్వుదే
ఈ దృష్టాంత వ్యావనీకియన్ను బోధిసుత్తదే?

(c) దుర్జనను విద్యావంతనాగిద్దాగ్యూ కృజిసల్పడతక్క వనేంబువదక్కి ఈళిరువ దృష్టాంత వ్యావదు?

(d) చ్ఛేర్యపద్ధతియల్లి ఉత్తమ మధ్యమాధమర్యారు?

(e) నేరేచ్ఛేవాశ్రయ నార్యను
తిరేబిద్దు ముగుళ్వనిరదే—తేరదిం
దురుళన నార్యను—
తరదింబిద్దేళదిఱన దిష్టాశ్రయదిం.
ఇదరల్లి లోపిసిరువ పదగళేరడన్నూ బరేయబేకు.

(f) బాళలు రమ్యమల్లవే నృపశ్రేష్ఠోజిత ఉర్మ్యసంజయం
... ... భవ్యర్కోండరరణ్యవాసవం.

ఇఱలోకవ్యాపారగళు రమ్యవాగిరలు ఆరణ్యవాసవన్ను కొండద్దక్కే కారణవేను?

VII. సమాసవందరేను?

(1) కేళగిన సమాసిత పదగళిగే సమాసనిష్పత్తియన్ను తోరిసి సమాసద ఈసరన్నూ పదద అర్థవన్నూ బరేయువదు.

ఉష్ట్రాపఱరణాపవాద. విధృతతుఱసకేరణను. పొడవి యోడియ, గోముఖవ్యాఘ్ర. సకలకలాకోవిదర్. సాధుసత్తమ.

(2) కేళగిన పదగళల్లిరతక్క సంధియన్ను వింగడిసి బరేయువదు.

ప్రత్యక. కేగ్గాల, లోకోక్తి, శిలేయోల్, ఆవరలి యొందొంటియ ఈజ్జిగళ కురుఱంపిడిదు.

(3) కేళగే బరదిరువవుగళన్ను సంధిమాడి బరేయువదు.

ఈస + అక్కి. ఉళి + అవ్కి, బా + ఐయ, ఈష క్ + విజార. పితృ + అయణ.

VIII. ఇంకిరల్ పరరిగుపకార మెళ్ళనికిల్ల
దంకిరువ ఓమఖూధరవం సరస్వకిం

కాంతనేకకే సృజిసి ధరేయోళిట్టిపన్ నోం రుజిసదిరుకిరుద నమగే.

ఈ వాక్యవన్ను విభజిసబేకు.

(1) గుర్తుమాడిరువ శబ్దగళ వాజకముంతాద అంశ గళన్ను ఓళువదు (Parse)

(2) రుజిసు, ననేసు, లూలిసు, మాడిసు. ఇవుగళల్లిర తక్కప్రత్యయద ప్రయోజనవేను ?

IX. (a) నిష్పన్న గుణవాజక, కృద్వాజి, కృన్నామ, క్రియానామ, ఇవుగళ లక్షణగళన్ను బరేదు ఒందొందక్కే రడేరడు దాకురణేగళన్ను ఓళువదు.

(b) కేళగే బరదిరువుగళల్లి తప్పుగళిద్దరే తిద్దువదు. ఇల్లదిద్దరే అవు శుద్ధవాగివే యేంబువదన్ను నిర్ధరివదు—

(1) కడివడేదగిడ జేగురిసువదు

(2) పడేయల్బప్పుదు యత్నదిందమణలోళ్ ప్రావీణ్యదిం క్రేలమం
గడిసల్బప్పుదలభ్యమాదశశశృంగం దూరసంజారదిం

(3) వళిగళుపుట్టికు ముఖదోళ్.

(4) తదీయతకినిశాధినాయకన యక్ష్మవమాణిస లారదిపన్వు.

(5) నన్నొంటియం కూడదిద్దరే అదేర బేలేయన్నాదరూ నిమ్మింద తేక్తిసదే బిడేను.

(6) నాయిగే కుక్తిడచే ఓడదు కోందరే పడిసుక్తిద్దళు

X. సమపాదవృత్తక్కూ అసమపాద వృత్తక్కూ క్షీదవేను?
మకియేవిమోఁడువం కోరేయు మార్ధశరీరక జంద్ర
జూడనోళ్

ఇదర గణవిభజనేయన్ను మాడి వృత్తదఱిసరు ఓళువదు.

VIII. నేఁ ప్రశ్నేయల్లి బరదిరకక్క శ్లోకార్ధ యావవృత్త?
లూవృత్తద మాత్రాసంఖ్యేయేష్టు?

III. ప్రశ్నేయల్లిరువ శ్లోకదల్లి కన్నడ ఛందస్సిన వద్దకి ప్రకార యావదాదరూ ఛందోఁభంగ విచేయోఁ?

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

KANARESE: TRANSLATION AND COMPOSITION.

I. Translate into Kanarese.—[See Urdu Translation paper, p. xxxvi].

II. Subject of a short Essay in Kanarese:

Supposing a relation or a friend of your own age to come to spend a week with you; describe how you would spend the time, what you would take him to see, and what you would both do.

నిన్న ప్రాయద ఒబ్బ స్నేఁహితనాగలి నేంటనాగలి ఒందు హస్తి నిన్నల్లి నిల్లలిక్కే బందరే నీను హ్యాగే సమయవన్ను కళేయువి, అవనన్ను ఏనేను నోఁడలిక్కే కరకోండు ఓఁగువి, మత్తు నీవిబ్బరూ ఏనేను మాడువిరి ఎంబదన్ను బరి.

III. Translate into idiomatic English:

1. తన్నలిపోక్క నీరిగే సదాత్మగుణంగళ నిత్త క్షీరమ
క్కున్న కదగ్ని యింతపిసలోగ్గిరలారదే నీరశోషిసల్
ఖిన్నతేగోండు పాలనలకేలగళోళ్ళిళలేద్దువారి సం
పన్నతేయింద శాంతిపుదు ఖవ్వరమిత్రకే ఇంతుటల్ల వేఁ॥

2 కార్యారంభవనంతరాయశయదిం కృకోళ్ళరానిఁజ
రుం
కార్యారంభవగృదుమధ్యమరు విఘ్నావాప్తియింబిట్టప
ర్కార్యారంశవగృదమీలే బఱవిఘ్నశ్రేణిగోళ్గాగదే
కార్యంసాధిపరుక్తమర్సుధృకియిం గాంశీర్యముద్దీపి
సల్ ॥

3. లూవపర్యంత మీకాయ మరుజవో మక్త
దావపర్యంతముంజరేదూరమిఱుదో మ
క్తావపర్యంత మింద్రియ పాటవంకోలగదంకే రా
జిసుకిర్పుదోఁ
లూవపర్యంతముం సావదిఱనోఁ మనుజ
నావరేయోశాక్మసుఖ కార్యకకియం బయసి
గృవదక్యుక్తమం శావియకోఁడువరే మనేపక్తి బేఁ
యుక్తిరల్ ॥

4. ఈ మీరేగే భద్రకాళియ లినుగ్రఱవం పడేద వివేఁ
కజంద్రను లిల్లింక్కేళి మిల్లనే మనేగేబందు సేఁరి బరకక్కకార్య
యవంకురికు యోఁజేసుక, లూ రాక్రియేల్ల నిద్దే ఇల్లచే కళేదు,
బేళకాగుకలు రాయనం ఓల్పేసలు ఱోఁగిరలు, కేలవరు రేకరు
నూకనధాన్యవన్ను కొండుబందు రాయనిగే కాణికేయం ఇట్టరు
రాయనవరన్ను కక్క సన్మానవన్ను మాడి కళుఱిసి మనేవార్కి
యంకరదు లూ భక్తవన్నా కనిగోప్పిసి ఇదరిందలేఁ ఇరుళోఁగిర
వాగిరబేఁకు ఎందు ఱోఁళిదను. అవనచేఁమీరే లిడిగేయవనిగే ఒ
ప్పిసిదను. ధర్మవర్మను లూస్థానగద్దుగేయన్నేఁరి ఓలగంగోండి
రలు; విజయశేఁఖరను కళుఱిసిద భక్షశాండవు బందుదు.

5. లిదన్ను నినగే కోట్టద్దు సకలధర్మరక్షకనాద నీను
జరామరణ పర్జితనాగి నమ్మంతవరన్నేల్ల కాయలేళన్నియల్లచే

ಮತ್ತೆ ಬೇರೆಯಲ್ಲವು. ನಾನು ಕನಸಿನಲ್ಲಾದರೂ ಇಂತಪಕೀರ್ತಿಗೊಳಗೆ ಮಾಡುವದೆಂದು ನೆನದವನಾಗಿದ್ದಲ್ಲಿ ಇಂತೀದುರನಸ್ಥೆಯು ಬರದಲೇ ಇರುವುದು. ಊದುದಾದದು, ಗತಜಲ ಸೇತುಬಂಧನದಿಂದ ಪ್ರಯೋಜನವೇನು? ನಿನ್ನ ಚಿತ್ತಕ್ಕೊಪ್ಪಿದಂತೆ ಶಿಕ್ಷಿಸೆಂದು ಪ್ರಮಾಣಪುರಸ್ಸರವಾಗಿನಿಂತನು.

6. ಬಹುಕಾಲದ ಕೆಳಗೆ ನಾನೊಂದು ಗಿಡದಮೇಲೆ ವಾಸಮಾಡುತ್ತಿರಲಾಗಿ ಅದೇಗಿಡದ ಪೊಟ್ರಿಯಲ್ಲಿ ಕಪಿಂಜಲನೆಂಬ ಪಕ್ಷಿ ಒಕ್ಕಲಿತ್ತು. ಒಂದುದಿನ ಕಪಿಂಜಲನು ಸಾಯಂಕಾಲದವರೆಗೆ ನಿವಾಸಸ್ಥಳಕ್ಕೆ ಬಾರದೆ ಹೋಗಲಾಗಿ ನಾನು ದಿಗಲುಪಟ್ಟು ದಿಕ್ಕುಗಳನ್ನೆಲ್ಲ ನೋಡುತ್ತಿರುವ ಸಮಯದಲ್ಲಿ ದೀರ್ಘಕನೆಂಬ ಮೊಲವು ಊ ಪೊಟ್ರಿಗೆ ಪ್ರವೇಶಿಸಿತು, ಬೇಡೆಂತ ನಾನು ಎಷ್ಟುಹೇಳಿದಾಗ್ಯೂ ಕೇಳಲಿಲ್ಲ. ಬಳಿಕ ಸ್ವಲ್ಪ ಹೊತ್ತಿಗೆ ಕಪಿಂಜಲನು ಬಂದು ನನ್ನ ಸ್ಥಳದಲ್ಲಿ ನೀನು ಯಾಕೆ ಬಂದಿದ್ದಿಯೇ, ಹೊರಗೆ ಹೋಗೆಂದು ಹೇಳಿದನು. ಕೌವಿಗಳು ಕೆರೆಗಳು ಮರದ ಪೊಟ್ರಿಗಳು ಮೊದಲಾದವು ಒಬ್ಬರ ಸೆತ್ತಲ್ಲ, ಯಾರು ಅತಿಕ್ರಮಿಸಿಕೊಂಡರೆ ಅವರ ಸೊತ್ತು, ಈಗ ಈ ಸ್ಥಲಕ್ಕೆ ನಾನು ಪ್ರವೇಶಿಸಿದೆ ನಾದ್ದರಿಂದ ನಿನಗೆ ನಿಮಿತ್ತವಿಲ್ಲ ಹೋಗೆಂತ ದೀರ್ಘಕನು ಹೇಳಿದನು.

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

MALAYALAM: TEXT-BOOKS AND GRAMMAR.

I. പതിന്നാലുവൃത്തം ഏതുപുരാണത്തിലും അതിന്റെ ഏത അംശത്തിലും ഉൾപ്പെട്ടതാകുന്നു എന്നും അതിന്ന മണിപ്രവാളശ്ലോകം എന്ന പേർ വരുന്നത എങ്ങിനെയന്നും മണിപ്രവാള ശ്ലോകത്തിന്റെ അർത്ഥവും ക്രമവും എന്ത എന്നും വ്യക്തമായി കാണിക്കു.

II. (a) ഭീമസേനൻ കൃഷ്ണനോട നൂറേറാർ തന്നോട ചെയ്ത അനേക അന്യായങ്ങ

ളിൽവെച്ച ഒന്ന പ്രത്യേകം വിട്ടപോ കുന്നില്ലാ എന്ന പറഞ്ഞത ഏതവ്വ സനത്തെ കുറിച്ചാകുന്നു.

(b) ചതുരോപായങ്ങളും ഏവ ആകുന്നു. അ തിന്ന വിദുരർ ധൃതരാഷ്ട്രനോട പറ ഞ്ഞശ്ലോകം ഓമ്മിച്ച എഴുതുക.

(c) പുരുഷസൽഗുണങ്ങളും ദുർഗുണങ്ങളും വി ദുരർ വർണ്ണിക്കുന്നതെങ്ങിനെ എന്ന വിസ്തരിച്ച പറക.

III. (a) രാജാക്കന്മാക്ക ബഹിരാലങ്കാരവു മന്തരാ ലങ്കാരവുമായി എന്തായിരിക്കേണ്ടത എന്നും ലോകാധിപത്യംലഭിക്കേണ്ടതി ന്നഎന്തുവേണ്ടു എന്നും വിദുരർ പറ ഞ്ഞ അഭിപ്രായത്തെപ്രസ്ഥാപിക്ക.

(b) മലകളിലെവെള്ളംപലനദികളുടെ ജലനിധിയിലെല്പോപരിപതനിരാജൻ ജലനിധിജലംകൊണ്ടൊരുവനുപകാരം കിമപിപുനരുണ്ടോ.

എന്നത ഏത ശ്ലോകത്തിന്ന ഉദാഹരണ മായി പറഞ്ഞിരിക്കുന്നു എന്നും അ തിൽ എന്തുപദേശം അടങ്ങിയിരിക്കു ന്നു എന്നും കാണിക്ക.

IV. കരിഷ്യേകിന്തു - പ്രശമനഗുണരാശെ - സുരാ ഞ്ഞൻ - ഏണിദൃക്ക - ശ്ലാഘനീയം - ക്ഷുൽപിപാസ പീഡിതൻ - ഗിരീന്ദ്രകന്യസുമങ്ങൾ - പിതൃമായ ആശി

സ്സ - അരികുലവനദവദേഹനൻ - നവപാരിദമാരുശ
രീരയുതൻ-മാത്രുംതവമിത്രം പരമന്യന്ന വമന്യൈ-കു
ത്രുചിദഹൊനഹി-നിശമയശിരംമെ - ത്രുജതനയജാലം.

ഇതുകളുടെ അർത്ഥം കൃത്യമായി മലയാളത്തിൽ എഴുതുക.

V. (a) കിംകിംമഹാകുടില സംഘങ്ങളെവിഗത.
ശംകംമുരാന്തകനൊടംകംപൊരുന്നവനെ
ലംഘിപ്പതിന്നിഹവലൃംഘ്യപ്രഭാവമിതി
ശംഘംജഗാദകടു വിശ്വംഭരായനമഃ.

(b) അംഭൊരുഹാസനനുമംഭൊജസായകനു
മംഭൊധിനായകനു മംഭൊദപംക്തികളും
ജംഭാരിതാനുമഥ കുംഭീന്ദ്രനുംബുഹു
ഗംഭീരഘോഷമൊടു വിശ്വംഭരായനമഃ.

(c) യൊവ്വനംധനസമ്പത്തിപ്രഭുത്വമവിവേ
കതാ, ഏകൈകമപ്യനർത്ഥായകിമുയത്രുച
തുഷ്ടയം.

ഇതുകളെ മധുരമലയാളത്തിൽ ആക്കുക. "യൊവ്വനം ധനസമ്പത്തി" എന്ന ശ്ലോകത്തിൽ അടങ്ങിയിരിക്കുന്ന ഉപദേശം സൂക്ഷ്മത്തോടെ എഴുതുക.

VI. (a) പാണ്ഡവന്മാർക്കു അജ്ഞാതവേഷം ധരിച്ചുനടപ്പാൻ സംഗതി എന്ത.

(b) പാണ്ഡവർ വിരാടരാജ്യത്തിൽവരുമ്പോൾ ആയുധങ്ങൾ എവിടെവച്ചു സൂക്ഷിച്ചു എന്നും അവരുടെ പരോക്ഷ

പേരുകളും പ്രവൃത്തികളും എന്തായിരുന്നു എന്നും വ്യക്തമായി പറക.

(c) അജ്ജുനന്റെ പത്തപേരുകളും അവറിന്റെ അർത്ഥങ്ങളും എന്തായിരുന്നു.

VII. (a) കൃഷ്ണന്റെ വാഹനം-ആയുധങ്ങൾ-മാറിൽ അണിയുന്ന രത്നം-മാറിലുള്ള മറ്റ-എന്നിവറിന്റെ പ്രത്യേക നാമധേയം എന്തു.

(b) കന്യസുതൻ - കാളിയവിഷനാശനൻ-ഗാന്ധാരരാജൻ-ശംബരരിപു - എന്നിവരാരാകുന്നു. അവക്ക ഓരം പേരുകൾ ഉണ്ടാവാൻ സംഗതിയന്തു.

(c) പാഞ്ചാലിയുടെ പൂവ്വജന്മത്തിൽ ഉള്ളപേർ എന്തു. പാഞ്ചാലി എന്ന പേരായി ജനിപ്പാൻ കാരണമെന്തു.

VIII. കാമാക്ഷിരാജ്യത്തെ വിട്ടപോകുന്നതിനാൽ സുശീലക്ക ഉണ്ടാകുന്ന ലാഭം എന്തെന്ന ധൂർത്തനാഥൻ പറഞ്ഞപ്രകാരം തെളിയിക്ക അവന്റെ അഭിപ്രായം ന്യായമായിട്ടുള്ളതൊ. അല്ലെന്ന തോന്നിയാൽ അതിന്റെ കുറവുകൾ എന്തെന്ന സ്പഷ്ടമായി വെളിപ്പെടുത്തുക.

IX. (a) നയഗ്രണനിധെ-എന്നപദത്തിന്റെ സമാസം എന്തു.

(b) നന്ദനന്ദനൻ - എന്നത വ്യാകരിക്ക.

(c) പുകഴ്ക - വെല്ലുക-എന്ന ക്രിയകളുടെ ഭൂതകാലവും ഭൂതംഭാവി എന്ന ക്രിയാസ്വനങ്ങളും എങ്ങിനെ.

(d) പഠിപ്പിച്ചിടിനാൻ - കരിഷ്യെകിന്തു. ഇവകളെ പരിശ്ലേദിക്കുക.

X. (a) ഭൂതക്രിയാസ്വനം - ഭാവിക്രിയാസ്വനം എന്നിവറിന്ന പകരമായി മണിപ്രവാള ശ്ലോകങ്ങളിൽ ഉപയോഗിച്ചവരുന്ന സംസ്കൃതപദങ്ങളും മൂന്ന ദൃഷ്ടാന്തങ്ങളാൽ കാണിക്ക.

(b) താഴെ പറയുന്ന വാക്കുകളുടെ വ്യുത്പാസത്തെ ദൃഷ്ടാന്തപുരസ്സരമായി വ്യക്തപ്പെടുത്തുക.

1. പ്രകൃതി - ധാതു.

2. ആഖ്യാ - കർത്താ.

3. ഉപവാക്യം - അധീനവാക്യം.

4. പ്രതിസംഖ്യാനാമം-പ്രതിസംജ്ഞാനാമം.

5. പ്രത്യയം - ഉപസർഗ്ഗം.

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

MALAYALAM: TRANSLATION AND COMPOSITION.

I (a) Translate into Malayalam—[See Urdu Translation paper, p. xxxvi].

II. Subject of a short Essay in Malayalam:

Supposing a relation or a friend of your own age to come to spend a week with you, describe how you would spend the time, what you would take him to see, and what you would both do.

നിങ്ങളുടെ സമവയസ്സായ ഒരു സ്നേഹിതനൊ ബന്ധുവൊ ഒരാഴ്ച ഒന്നിച്ച താമസിക്കുന്നതിന്നായി വന്നാൽ ആ ആഴ്ചയിൽ നിങ്ങൾ രണ്ടുപേരും എന്തു ചെയ്യുമെന്നും സ്നേഹിതനെയൊ ബന്ധുവെയൊ എന്തെല്ലാം കൊണ്ടുപോയി കാണിക്കുമെന്നും നിങ്ങളുടെ സമയം എങ്ങിനെ ഉപയോഗിക്കുമെന്നും കുറിച്ച ഒരു ചെറുതായ പ്രസംഗം എഴുതുക.)

III. Translate into English—

(a) വിമതന്മാരുടെവീര്യംശമിപ്പിപ്പാൻ
ക്ഷമയുംനന്നല്ലസാമവുംനന്നല്ല
സമരംചെയ്യെണംസാഹസംചെയ്യെണം
ശ്രമവുംചെയ്യെണംദേവനാരായണ.

(b) കണ്ടാൽനമുക്കിന്നുമിണ്ടായ്കവേണം
കൊണ്ടാടിയൊളുംമദിക്കുംജളന്മാർ
വെണ്ടാസനത്തിന്നകൊപ്പിടുവന്നാൽ
രണ്ടില്ലപക്ഷംമഹാദേവശംഭൊ.

IV. ക. രാജാവായിരുന്ന എന്റെ അച്ഛൻ ഇവന്റെ അച്ഛന്റെ സുഹൃത്തായിരുന്നു.

സു. എന്നാൽ അതുകൊണ്ട നീയം അവന്റെ പുത്രനെ അധികം സ്നേഹിക്കെണമന്നുണ്ടൊ. അങ്ങിനെ വിചാരിച്ചാൽ എന്റെ അച്ഛൻ ഇവന്റെ അച്ഛന്റെ വിരോധിയാകകൊണ്ട ഞാനും അവനെ വെറുക്കെ

ണ്ടയൊ. എന്നിട്ടും ഞാൻ അവനെ വെ
റുക്കുന്നില്ലാ.

ക. അയ്യൊ! എനിക്കവേണ്ടി എങ്കിലും നീ അവ
നോട വിരോധഭാവം കാണിക്കല്ലെ.

സു. എന്തുകൊണ്ട. നീപറഞ്ഞകാരണം നോക്കി
യാൽ അത യോഗ്യമല്ലയൊ.

ക. ഞാൻപറഞ്ഞ കാരണത്തിന്നായി ഞാൻ അ
വനെ സ്നേഹിക്കാം. അവൻ എന്റെ സ്നേ
ഹിതൻ എന്നുള്ള കാരണത്തിന്മേൽ നി അ
വനെ സ്നേഹിച്ചാലും ഇതാ നിന്റെ അ
ച്ഛൻ എഴുന്നെള്ളുന്നു.

സു. അയ്യൊ! അച്ഛന്റെ മുഖത്തിൽ കോപാ
ഗ്നി ജ്വലിക്കുന്നുവല്ലൊ.

V. (a) ഏറവും പ്രയാസമുള്ള കാര്യം തന്നെ താ
നറിയുന്നതാകുന്നു.

(b) തനിക്ക യാതൊരു ഉപകാരവും ചെയ്യാത്തവ
നെ സ്നേഹിക്കുന്ന ഒരു ഗുണം മനുഷ്യർക്ക
മൃഗങ്ങളിൽവെച്ച വിശേഷ വിധിയായിട്ട
ള്ളതാകുന്നു.

(c) നിന്റെ ഇന്ദ്രിയങ്ങളെ നീ വശത്താക്കുക.
അല്ലെങ്കിൽ നി ഇന്ദ്രിയങ്ങൾക്ക വശനായ
ഭവിക്കും.

(d) ഇന്ദ്രിയങ്ങൾക്ക കീഴടങ്ങുന്നവർ അടിമകളി
ലും വെച്ച ഏറവും താണതരം അടിമകളാ
കുന്നു.

VI. ശെരിയായി സമയത്തെ ഉപയോഗിച്ചുവരേണ്ടതിലെക്ക താഴെ പറയുന്ന നടവടിയെ മനസ്സിൽ ഓൎമ്മ വെക്കണം. മനുഷ്യൎക്ക ദേഹത്തിന്നും മനസ്സിന്നും സുഖം വേണമെങ്കിൽ രാത്രിയിൽ ആറ മണിക്കൂറ എങ്കിലും ഉറങ്ങണം. അത രാത്രി ൧൦ മുതൽ രാവിലെ ൬ മണിവരെയാകുന്നു വേണ്ടത. നാലമണിക്ക എഴുനില്ക്കണം. എഴുനീററ ഉടനെ അന്ന ചെയ്യേണ്ടുന്ന പ്രവൃത്തികൾ എന്തെല്ലാമെന്നും അതിൽ ഏതെതാകുന്നു മുമ്പമുമ്പ ചെയ്യേണ്ടത എന്നും ആലോചിച്ച നിശ്ചയിക്കെണം. എന്നിട്ട ആവക പ്രവൃത്തികളുടെ വിവരം എഴുതിവെക്കേണം. ഒന്നാമത്തെ പ്രവൃത്തി ഒന്നാമതും ൨-ാമത്തെത, ൨-ാമതും ഇങ്ങിനെ വഴിക്കവഴിയായിട്ട ചെയ്യെണം. വൈകുന്നേരം, കിടക്കുന്നതിന്ന മുമ്പായിട്ട ഏതെല്ലാമാണ തീൎന്നത എന്നും ഏതെല്ലാമാണ ബാക്കി എന്നും നോക്കെണം. വല്ലതും ബാക്കിയായി കണ്ടാൽ അതിനെ പിറെറന്ന ചെയ്യേണ്ടതിൽ ഒന്നാമതായിട്ട വെക്കെണം. ഈവിധം കൃത്യത്തോടെ നടന്ന പൊന്നാൽ സന്താപത്തിനും നടക്കാഞ്ഞാൽ സന്തോഷത്തിന്നും എടവരുന്നതല്ലാ.

WEDNESDAY, DECEMBER 16TH, 10 A.M. TO 1 P.M.

URIYA: TEXT-BOOKS AND GRAMMAR.

I. କେଉଁ ପ୍ରାକୃତିକ ନିୟମାନୁସାରେ ବ୍ୟୋମଯାନ ଊର୍ଦ୍ଧ୍ୱକୁ ଉଠେ ତାହା ଭଲ କରି ବୁଝାଇ ଦିଅ ।

II. 1. ଅନ୍ୟର ପ୍ରତି ଶ୍ରୋଧ ପ୍ରକାଶପୂର୍ବକ କଟୁବାକ୍ୟ ପ୍ରୟୋଗ କରି ନିକୃଷ୍ଟ ପ୍ରବୃତ୍ତର ଉତ୍ତେଜନା କଲେ ଯେ

ସ୍ୱକୀୟ ସ୍ୱଭାବ କଲକ୍ଷିତ ହୁଏ, ଏହା ସେମାନଙ୍କର ଦୁର୍ଭାଗ୍ୟଜନକ ହୋଇ ନାହିଁ ।

2. ଆମ୍ଭେ ବାଳକ ପରି ବେଳାଭୂମିରୁ ଉପଲଖଣ୍ଡ ସଙ୍କଳନ କରୁଅଛୁଁ, କିନ୍ତୁ ଜ୍ଞାନମହାର୍ଣ୍ଣବ ଯୁଗେଯୁଗରେ ଅକ୍ଷୁଣ୍ଣ ରହୁଅଛି ।

3. ପ୍ରଭାପରୁଦ୍ର ଦେବ ମାନବଲୀଳା ସମ୍ବରଣ କଲା ଉତ୍ତାରୁ ଓଡ଼ିଶା ନରବଳ୍ଲିନ୍ନ ଅନ୍ତର୍ବିବାଦ ଓ ନାନା ପ୍ରକାର ବହିଃଶତ୍ରୁର ଲକ୍ଷ୍ୟ ହୋଇ ଉଠିଲା ।

4. ଗୋଷ୍ଠିଏ ମୂର୍ତ୍ତିରେ ସୌନ୍ଦର୍ଯ୍ୟର ପରାକାଷ୍ଠା ଦେଖାଇବା ଯାଁଇ ଚେଷ୍ଟା କଲ ସେ ସବୁକୁ ସ୍ଥଳେ ସ୍ଥଳେ ଅସୁନ୍ଦର ଓ ଅସୌଷ୍ଠବ-ଯୁକ୍ତ କର ଅଛନ୍ତି ।

5. ବୌଦ୍ଧଧର୍ମ୍ମର ଅହିଂସାଭାବକୁ ବୈଷ୍ଣବଧର୍ମ୍ମର ବୀଜରେ ପ୍ରୋତ୍ଥିତ କଲେ ।

6. ଖଣ୍ଡଗିରି ଓ ଉଦୟଗିରିର ଅପୂର୍ବ୍ବ ପ୍ରାକୃତିକ ଶୋଭା ଧ୍ୟାନମଗ୍ନ ବୌଦ୍ଧ ଯୋଗିଙ୍କର ଚିତ୍ତକୁ ଆକର୍ଷଣ କରଥିଲା ।

(କ) ଉପର-ଲିଖିତ ବାକ୍ୟମାନଙ୍କୁ ସୁନ୍ଦରରୂପେ ବୁଝାଇ ଲେଖ ।

(ଖ) (୨) ଚିହ୍ନିତ ବାକ୍ୟ କାହାର ମୁଖ-ନିଃସୃତ ବୋଲି ପ୍ରସିଦ୍ଧ ?

(ଗ) ରେଖା-ଚିହ୍ନିତ ପଦମାନଙ୍କରେ ଥିବା ସମାସ ଓ ସନ୍ଧି ଲେଖ ।

III. (କ) କ୍ଷମତାଶାଳୀ, ସମ୍ଭବତଃ, ବୌଦ୍ଧ, ଅନୁରାଗ ଓ ବାତ୍ସଲ୍ୟ ଏ ପଦମାନ କି ପରି ସିଦ୍ଧ ହୋଇ ଅଛି ?

(ଖ) ଜଘନ୍ୟ, ଦୀପ୍ତବାନ୍, କର୍ତ୍ତବ୍ୟ, ଭୃତ୍ୟ ଓ ଦେୟ ଏମାନଙ୍କର ବ୍ୟୁତ୍ପତ୍ତି ଲେଖ ।

(ଗ) ଉଷ୍ଣୀଷ, ପୁଙ୍ଖାନୁପୁଙ୍ଖରୂପେ, ଧୀଶକ୍ତି-ସମ୍ପନ୍ନ, ବର୍ମ୍ମ, ଏକେଶ୍ୱରବାଦୀ, ଉପାନହ, ହିମଶିଳା, ଗଣ୍ଡଶୈଳ ଓ ଉପଜୀବିକା ଏ ପଦମାନଙ୍କର ଅର୍ଥ ଲେଖ ।

IV. ଐର ରାଜା ଜୈନ ଥିଲେ ନାହିଁ ଏହା ନିଶ୍ଚୟ କରିବାକୁ ଓଡ଼ିଶାର ଇତିହାସ-ଲେଖକ କି ୨ ପ୍ରମାଣ ଦେଖାଇ ଅଛନ୍ତି ।

V. ନିମ୍ନଲିଖିତ ଅସମ୍ପୂର୍ଣ୍ଣ ପଂକ୍ତିମାନଙ୍କୁ ପୂର୍ଣ୍ଣ କରି ଲେଖ ।

1. ଦିବସରେ ନିଦ୍ରା——ଅଟେ ।
2. ଜନ୍ମ ହେଲେ——ନିଶ୍ଚୟ ।
3. ଯେଉଁ ସ୍ଥାନର ନାମୋଚ୍ଚାରଣ——ପ୍ରେମସିନ୍ଧୁ ଉଚ୍ଛଳିତ——ଉଠେ, ଧରାତଳରେ ତତ୍ସମ——ଆଉ କି ଅଛି?
4. ଭୃତ୍ୟମାନଙ୍କ——ସର୍ବଦା——ବ୍ୟବହାର କରିବା ଉଚିତ ।
5. ଏହି ବାଷ୍ପର——ଆଶ୍ଚର୍ଯ୍ୟ——ଅଛି ଯେ ବାୟୁ ସଂଲଗ୍ନ ହେଲେ——ଦୀପ୍ତବାନ୍ ହୋଇ ଉଠେ ।

VI. ନିମ୍ନ-ଦତ୍ତ ପଦମାନଙ୍କୁ ଘେନି ଗୋଟିଏ ରଚନା କର । ବର୍ଷାକାଳରେ, ମେଘାଚ୍ଛନ୍ନ, ଧାନ୍ୟ, କ୍ଷେତ୍ରି ସବୁ, ମେଘାଚ୍ଛନ୍ନ, ସୂର୍ଯ୍ୟ, ପଙ୍କିଳ, ନଦୀ, ଅଦୃଶ୍ୟ, ପଥସବୁ, ଜଳପୂର୍ଣ୍ଣ, ଭେକମାନେ, ନାଳ, କଳରବ, କୂପ ।

VII. ଗଙ୍ଗାବଂଶୀୟ ରାଜାମାନଙ୍କ ଶାସନ କାଳରେ ଓଡ଼ିଶାର କିପରି ସାମାଜିକ ଅବସ୍ଥାଥିଲା ବର୍ଣ୍ଣନ କର ।

WEDNESDAY, DECEMBER 16TH, 2 TO 5 P M

URIYA : TRANSLATION AND COMPOSITION.

I Translation into Uriya.—[See Urdu Translation paper, p. xxxvi].

II Subject of a short Essay in Uriya :—

Supposing a relation or a friend of your own age to come to spend a week with you, describe how you would spend the time, what you would take him to see, and what you would both do.

III Translate into English :—

(କ) ଖଣ୍ଡଗିରି ଓ ଉଦୟଗିରିର ସ୍ଥାନ୍ୟରେ ଜଳାଶୟମାନ ନୟନର ପ୍ରୀତିବର୍ଦ୍ଧନ କରଇ । ଐର ରାଜାଙ୍କ ଆଦେଶରେ ଏମାନ ମଧ୍ୟ ଖୋଦିତ ହୋଇଥିବାର ଅନୁମିତ ହୋଇପାରେ । ଏହି କୁଣ୍ଡଚୟର ପାଣି ଅତି ଶୀତଳ ଓ ସୁମିଷ୍ଟ ।

(ଖ) ଗ୍ରହଗଣ ଯେମନ୍ତ ସୂର୍ଯ୍ୟଙ୍କୁ ପ୍ରଦକ୍ଷିଣ କରନ୍ତି, ସେହିରୂପ କେତେଗୁଡ଼ିଏ ଉପଗ୍ରହ ଅଛି, ସେମାନେ କୌଣସିଏ ଗ୍ରହର ଚତୁର୍ଦ୍ଦିଗରେ ପରିଭ୍ରମଣ କରନ୍ତି । ଚନ୍ଦ୍ର ପୃଥିବୀଗ୍ରହକୁ ପ୍ରଦକ୍ଷିଣ କରେ, ଅତଏବ ତାହା ଏକ ଉପଗ୍ରହ । ପୃଥିବୀର ଯେମନ୍ତ ଏହି ଗୋଟିଏ ଉପଗ୍ରହ, ବୃହସ୍ପତିର ଏହିପ୍ରକାର ଚାରି, ଶନିର ଆଠ, ହର୍ଶେଲର ଛ ଏବଂ ନେପଚ୍ୟୁନର ଦୁଇ ଉପଗ୍ରହ ଆବିଷ୍କୃତ ହୋଇ ଅଛନ୍ତି ।

(ଗ) ଭେଲେ, ଦେଖ ତା ରଙ୍ଗ । ତାହା ଆଖିଁରେ ବଡ଼ ସାନ ନାହିଁ । ସେ ଏଡ଼େ ବାହାଣିଆ କେବେ

ହେଲା ! ଏବେ ସେ ବାପ ଦାଦାର ନା କାଢ଼ିବ । ଭଲା ଦେଖା ଯିବ ତା ଦୌଡ଼ କେତେଦୂର, ଆମ ଦୌଡ଼ କେତେଦୂର । ଏଥର ତାକୁ ଚର୍ଖି ପୁଣି ନବୁଲେଇ ତାକୁ କେଭେ ଛଡ଼ିବି ନାହିଁ ।

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

FRENCH: TEXT-BOOKS AND GRAMMAR.

I. Give—

(*a*) the first person singular of the future of *envoyer, pouvoir, pourvoir, revoir, devoir, encourir, jeter;*

(*b*) the feminine of *prince, compagnon, bénin, doux, net, faux;* and the masculine of *vieille, duchesse, chèvre;*

(*c*) the plural of *gentilhomme, chacal, beau-frère, travail, œil, passe-Cicéron;* and the singular of *aïeuls, poids, réseaux;*

(*d*) the gender of *théâtre, peau, demi-douzaine, cognée, aigle.*

Conjugate the verb *aller* in the present indicative and in the imperative.

II. What do you call *Cédille* and *Tréma* in French? What purposes do they serve? Exemplify the use of both.

How many accents are used in French? Supply the accents in the following sentence:—Les Moscovites arriverent assez a temps pour empecher tout le convoi d'etre consume par les flammes.

III. Rewrite the following extract, correcting any orthographical error:—

L'asçandent de Charles XII prévalut. Il ramportat une victoire complette. Le camp enemi, les drapaux, l'artillery, la caisse militère d'Auguste lui demerèrent. Il ne s'areta pas sur le chant de bataille, et marchat droit à Cracovie.

IV. Parse the words in italics:

(*a*) Ce dernier espérait, quoique son camarade
Soutînt que le *gisant irait* voir ses aïeux.

(*b*) *Que* faisons-nous, dit-il, de ce poids inutile,
•Et *qui* va balayant tous les sentiers fangeux ?
Que nous *sert* cette queue ? Il *faut* qu'on se la coupe.

(*c*) Ulrique Eléonore était digne de plus de confiance que *son* époux ne *lui en* témoigna.

V. Give the meaning of the words in italics only :

(*a*) Deux officiers du régiment de ce brave Troutfetre *s'entretuèrent.*

(*b*) Charles *n'était plus lui-même*

(*c*) Il arriva en un quart d'heure à l'autre bord, et *fut mortifié de ne sauter à terre que le quatrième.*

(*d*) Le trône *est presque toujours à l'enchère.*

(*e*) *On* proposa dans le conseil du Czar *d'user de représailles.*

(*f*) L'hiver *y* règne neuf mois de l'année.

VI. Translate into English :

(*a*) Éconduire un lion rarement se pratique.

(*b*) Mes petits sont mignons,
Beaux, bien-faits et jolis sur tous leurs compagnons.

(*c*) Rien ne sert de courir ; il faut partir à point.

(*d*) Comme vous êtes roi, vous ne considérez
Qui ni quoi.

(*e*) C'était à qui précipiterait l'exécution de ce dessein, pour s'en faire un mérite auprès du roi.

VII. Mark the difference between—

{ Un trompette, / Une trompette. } { Dessein, / Dessin. } { Aïeuls, / Aïeux. } { Un tour, / Une tour }

{ Il s'impose à tous, / Il en impose à tous. } { Un méchant auteur, / Un auteur méchant. }

{ Il raisonne bien, / Ça résonne bien. }

VIII. Express—

1° in English :

Il fait le sourd.
Cela fera bien mon affaire.
Il ne fait que murmurer.
Il ne fait que d'arriver.
Il n'en fait pas d'autres.
Vous ferez mieux de vous taire.

2° in French:

It is very hot to-day.
I will do my best.
It is all over with him.
I do not think much of him.

3° in French, but in *direct* discourse:

Ainsi dit, il vient à pas comptés,
Se dit écolier d'Hippocrate;
Qu'il connait les vertus et les propriétés
De tous les simples de ces prés;
Qu'il sait guérir, sans qu'il se flatte,
Toute sorte de maux. Si dom coursier voulait
Ne point céler sa maladie,
Lui, loup, gratis le guérirait.

IX. Point out any grammatical inaccuracies in the following extracts:—

(*a*) Elle sent son ongle maligne.

(*b*) Jamais idole, quel qu'il fût,
N'avait eu cuisine si grasse.

(*c*) Il n'assistait presque jamais dans le conseil que pour croiser les jambes sur la table.

(*d*) Son éloquence, à qui sa bonne mine donnait de la force, était d'autant plus persuasive qu'elle était sans art.

X. (*a*) Who, or what is meant by—

Le peuple souriquois. L'oiseau de Minerve. La Sémiramis du Nord. Les sœurs filandières. Les citoyennes des étangs.

(*b*) Give a *short* account in French of the battle of Poltava.

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

FRENCH: TRANSLATION.

I. Translate into English:

(i) Charles surmonta tous les obstacles, avançant toujours vers le Borysthène. Il rencontra sur son chemin vingt mille Moscovites, retranchés dans un lieu nommé Holówczin, derrière un marais, auquel on

ne pouvait aborder qu'en passant une rivière. Charles n'attendit pas pour les attaquer que le reste de son infanterie fut arrivé. Il se jette dans l'eau à la tête de ses gardes à pied; il traverse la rivière et le marais, ayant souvent de l'eau au dessus des épaules. Pendant qu'il allait ainsi aux ennemis, il avait ordonné à la cavalerie de faire le tour du marais pour prendre les ennemis en flanc. Les Moscovites, étonnés qu'aucune barrière ne pût les défendre, furent enfoncés en même temps par le Roi, qui les attaquait à pied, et par la cavalerie suédoise.

(ii) Un chemin par terre de sept cent cinquante-quatre verstes, pratiqué à travers des marais, qu'il fallait combler, conduit de Moscou à la nouvelle ville. «La plupart de ses projets ont été exécutés par ses mains; et deux impératrices, qui lui ont succédé, l'une après l'autre, ont encore été au delà de ses vues, quand elles étaient praticables, et n'ont abandonné que l'impossible.

Il a voyagé toujours dans ses États, autant que ses guerres l'ont pu permettre; mais il a voyagé en législateur et en physicien, examinant partout la nature, cherchant à la corriger ou à la perfectionner, sondant lui-même la profondeur des fleuves et des mers, ordonnant des écluses, visitant des chantiers, faisant fouiller des mines, éprouvant les métaux, faisant lever des cartes exactes et y travaillant de sa main.

II. Translate into English:

(*a*) C'était un buste creux et plus grand que nature.
Le Renard, en louant l'effort de la sculpture,
"Belle tête, dit-il, mais de cervelle point."

(*b*) Le biquet soupçonneux par la fente regarde:
Montrez-moi patte blanche, ou je n'ouvrirai point,
S'écria-t-il d'abord. Patte blanche est un point
Chez les loups, comme on sait, rarement en usage.

(*c*) Que nous sert cette queue? Il faut qu'on se la coupe.
Si l'on me croit, chacun s'y résoudra;
Votre avis est fort bon, dit quelqu'un de la troupe;
Mais tournez-vous, de grâce, et l'on vous répondra.

(*d*) Le père mort, les fils vous retournent le champ
Deçà, delà, partout; si bien qu'au bout de l'an,
Il en rapporta davantage
D'argent, point de caché; mais le père fut sage
De leur montrer avant sa mort
Que le travail est un trésor.

(*e*) J'avais franchi les monts, qui bornent cet état,
Et trottais comme un jeune rat
Qui cherche à se donner carrière,
Lorsque deux animaux m'ont arrêté lex yeux:
L'un doux, bénin et gracieux,
Et l'autre turbulent et plein d'inquiétued.

III. Translate into French:

(*a*) The fate of the residue of the Vendean army is sad to tell. Reduced now by massacre and desertion to less than twenty thousand, they stood almost stupefied with terror, gazing at the point of the opposite bank where the fatal boats were yet lying, and where their two generals had disappeared from their view. Sometimes they wished vainly enough that they were on the other side too: sometimes they indulged a dreamy hope that their generals would reappear, bringing deliverance.

(*b*) It begins to grow late, it is time to go home.
I don't like sitting up late, let us go to bed.
I am afraid, you will be too late.
I shall expect you, but I will not wait for you.
Can you tell me what o'clock it is?
Upon my honour, it is but too true.

IV. Translate into English:

C'était pendant l'horreur d'une profonde nuit:
Ma mère Jézabel devant moi s'est montrée,
Comme au jour de sa mort pompeusement parée.
Les malheurs n'avaient point abattu sa fierté;
Même elle avait encor cet éclat emprunté
Dont elle eut soin de peindre et d'orner son visage,
Pour réparer des ans l'irréparable outrage.
"Tremble, m' a-t-elle dit, fille digne de moi.
Le cruel Dieu des Juifs l'emporte aussi sur toi.
Je te plains de tomber dans ses mains redoutables,

Ma fille." En achevant ces mots épouvantables,
Son ombre vers mon lit a paru se baisser,
Et moi je lui tendais les mains pour l'embrasser.
Mais je n'ai plus trouvé qu'un horrible mélange
D'os et de chairs meurtris et traînés dans la fange,
Des lambeaux pleins de sang, et des membres affreux,
Que des chiens dévorants se disputaient entre eux.

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

ARITHMETIC.

I. Explain how the value of a fraction is not altered when its numerator and denominator are multiplied by the same number.

Simplify $\left(\frac{\frac{4}{11}\text{ of }1\frac{1}{2} - \frac{5}{6} + \frac{2}{3}}{\frac{3}{7}\text{ of }1\frac{2}{3} + 1\frac{1}{4}}\right) \times 4\frac{3}{10} - \frac{5}{6}\text{ of }\frac{1}{5}$.

II. If the rupee is worth 1*s.* 6$\frac{1}{4}$*d.*, express Rs. 6-5-4 as a fraction of £1; and find the least number of rupees equal in value to an integral number of pounds.

III. State the rule for converting recurring decimals into vulgar fractions; and find the value of $0\dot{0}\dot{3}$ of $2{\cdot}75$ of £3-2-6 + $0\,\dot{2}8571\dot{4}$ of $1{\cdot}3$ of £7-5-10 — $0{\cdot}5\dot{9}2\dot{5}$ of £2-16-3.

IV. Find by any method the value of 5 cwts. 2 qrs. 21 lbs. of goods at £3-7-6 per cwt.

V. The carriage of 17$\frac{1}{2}$ cwt. for 52 miles on a certain railway is 8*s.* 4*d.*; find what will be the cost of carrying 4$\frac{1}{2}$ cwt. for 300 miles on a railway on which the rate per mile is 9 per cent. lower.

VI. A landlord pays 1 per cent. for collecting his rents and a tax of 7 pies in the rupee on what he receives after paying the collector. He has a clear rental of Rs. 1,831-8-0. Find his gross rental.

VII. A grocer mixes four kinds of tea which cost him 5*s.*, 4*s.*, 3*s.*, 2*s.* per lb. respectively in the proportions of 2, 3, 4, 7 respectively. Find at what rate he must sell the mixture so as to gain 25 per cent. on the whole.

VIII. Define the terms *interest*, *discount*, and find in what time £533 6-8 will amount to £672 at 6$\frac{1}{2}$ per cent. per annum simple interest.

IX. A person invests £4,800 in 4 per cent., stock at 96, and after a year sells out at 92½ and invests the proceeds together with the interest for the year in stock at 96½. How much stock does he then purchase?

X. Find to four places of decimals the square root of $\frac{137}{162}$; and calculate the cost of surrounding with a fence a square field of 22½ acres at 3*d.* per yard.

XI. The population of a country increases at the rate of 7 per cent. every 10 years. What was the population 20 years ago of a country whose present population is 4,007,150?

THURSDAY, 17TH DECEMBER, 2 TO 3·30 P.M.

ALGEBRA.

I. Subtract $b\left\{a-(b+c)\right\}$ from the sum of $a\left\{a-(c-b)\right\}$ and $c\left\{a-(b-c)\right\}$, and obtain the continued product of $(a+b+c)\,(a+b-c)\,(a+c-b)\,(b+c-a)$.

II. Reduce $\frac{x^4-4x+3}{2x^5-11x^2-9}$ to its lowest terms.

III. Find the square root of $x^4-2ax^3+5a^2x^2-4a^3x+4a^4$.

IV. Solve the equations—

(1) $\frac{x}{x-2}+\frac{9-x}{7-x}=\frac{x+1}{x-1}+\frac{8-x}{6-x}$.

(2) $\frac{m}{x}+\frac{n}{y}=a, \frac{n}{x}+\frac{m}{y}=b$.

V. A set of bearers on a journey perform one-third of the distance at a certain rate and then halt one hour to take their food. The remainder of the journey is accomplished at only two-thirds of the former rate, and the bearers reach their destination in 7 hours after first starting. Had they travelled at the former rate 4½ miles further than they did before halting, they might have halted 22½ minutes longer and yet reached the end of their journey in the same time. Find the length of the journey.

FRIDAY, 18TH DECEMBER, 10 A.M. TO 12 NOON.

GEOMETRY.

I. Define a circle and a parallelogram. Prove that all the interior angles of a rectilinear figure together with four right angles are equal to twice as many right angles as the figure has sides.

II. Prove that triangles upon equal bases and between the same parallels are equal to one another.

III. The side A B of an equilateral triangle A B C is produced to a point P, and from P perpendiculars P D and P F are dropped respectively on A C and B C produced if necessary. Shew that the difference of these perpendiculars is equal to the altitude of the triangle.

IV. Show that in any triangle, the square on any side subtending an acute angle is less than the sum of the squares on the sides containing the acute angle by twice the rectangle contained by either of them and the straight line intercepted between the acute angle and the foot of the perpendicular on it from the opposite angle.

V. Prove that the opposite angles of any quadrilateral inscribed in a circle are together equal to two right angles.

VI. From the middle point of an arc B A C lines are drawn meeting the chord B C in D and E and the circumference in F and G. Show that the four points D, E, G, F lie on the circumference of a circle.

VII. Prove that in equal circles the angles which stand on equal arcs are equal to one another.

VIII. A D is a chord bisecting the right angle of a triangle ABC inscribed in a circle. Shew that if B A be produced to E so that A E = A C, and E C be joined and produced to meet the circumference in F, the figure A E F D is a parallelogram.

FRIDAY, 18TH DECEMBER, 2 TO 3-30 P.M.

PHYSICS.

I. Name three of the chief forces of nature. How do they differ from one another?

II. A piece of charcoal is suspended from one arm of a balance and is exactly counterpoised by a piece of lead at the extremity

of the opposite arm. If the balance be now placed under the receiver of an air-pump and the air exhausted, how will the balance be affected? Give reasons for your answer.

III. Sketch and describe the Bramah press. If a force of 28 lb on the small piston produce a pressure of 1 ton on the large piston, how many times is the area of the latter greater than that of the former?

IV. Describe an experiment to prove that air has weight

V. Explain fully a method of ascertaining the pitch of a musical note.

VI. When melting ice and salt are mixed together why is the temperature of the mixture lower than that of the ice?

VII. What is meant by refraction? Explain, by the help of a diagram, how a small object lying on the bottom of a vessel may be visible when the vessel is full of water, but invisible when the water is removed.

VIII. Describe a method of decomposing water by means of a battery. At which plate does the hydrogen appear?

IX. Describe an apparatus by which signals can be sent along a wire to a distant station, and explain the principle on which it acts.

FRIDAY, 18TH DECEMBER, 3-35 TO 5-5 P.M.

CHEMISTRY.

I. What is the composition of water? Describe an experiment by which its composition may be proved.

II. How is chlorine prepared, and what are its most important properties?

III. Explain fully what occurs when Potassium comes into contact with water.

IV. What substances are used in making soap? Give some account of the process of its manufacture.

V. Complete the equation $Zn + H_2 SO_4 =$

What weight of Zinc and of Sulphuric acid is required to yield four grams of Hydrogen?

SATURDAY, 19TH DECEMBER, 10 A.M. TO 12 NOON.

INDIAN HISTORY.

I. Who was the founder of Buddhism? In what respects was it opposed to Brahminism? Give approximately the periods of its ascendancy and decline. Give a short account of the Indian pilgrimage of Fa Hian.

II. 'The fate of India was more than once decided on the field of Panipat.' Explain this.

III. Give a very brief narrative (1) of the events that led to the founding of the Bahmini Kingdom in the Dekhan, and (2) of the overthrow of the native kingdom of Bijanagar.

IV. What provinces did the Moghal empire comprise in the reign of Akbar? Mention the noteworthy features of his policy. By whom was the Ain-Akbari compiled? What is its historical importance?

V. When, and with what object, was the East India Company formed? What were the functions of the Board of Control? State the circumstances that led to the dissolution of the Company.

VI. Sketch a map of India shewing the situation and extent of the Mahratta States at the commencement of this century.

(N.B.—*No marks will be assigned unless the map be* neat *and* clean *and sketched with a* fair *degree of* accuracy.)

VII. When, and under what circumstances, were the following provinces annexed to British India:—Tanjore, Coorg, Sind, Oude?

VIII. (*a*) When, between whom, and with what results, were the following battles fought:—Kohrar, Porto-Novo, Assai, Chillianwalla?

(*b*) How is each of the following names connected with Indian history:—Todar Mall, Nana Furnavis, Bussy, Alphonso Albuquerque?

SATURDAY, 19TH DECEMBER, 12-5 TO 2-5 P.M.

ENGLISH HISTORY.

I. Describe the Feudal System, as it was introduced into England by William the Conqueror.

II. Explain carefully the cause of the quarrel between Thomas à Becket and Henry II.

III. Give an account of the troubles in Scotland that led to its invasion by Edward I.

IV. On what did Edward III found his claim to the throne of France? Give the terms of (1) the treaty of Bretigny, (2) the treaty of Troyes.

V. State briefly the immediate circumstances that led to the outbreak of war between Spain and England, in the reign of Elizabeth.

VI. Write short notes on (1) The Gunpowder Plot; (2) The Trial of the Seven Bishops; (3) The Massacre of Glencoe; (4) The Act of Settlement.

VII. What possessions did England obtain by the Seven Years' War?

VIII. Draw a genealogical table showing (1) the connection of Henry VII with the Plantagenets; (2) the descent of James I from the Tudors.

SATURDAY, 19TH DECEMBER, 3 TO 5 P.M.

GEOGRAPHY.

I. (*a*) Define the following terms—Archipelago, Watershed, Bore, Selvas.

(*b*) What do the following names signify—Cologne, Gibraltar, Piedmont, Mississippi, Valparaiso, Malabar, Dehra Dun, Naini Tal.

II. (*a*) Name the places which are referred to in the following, giving the reasons for their being thus described:—

(1) The country which is called the "Garden of Europe."

(2) The Manchester of Belgium.

(3) The Gibraltar of America.

(4) The Liverpool of India.

(*b*) Describe with some degree of exactness the situation of the following places, stating anything for which each is remarkable:—Ajaccio, Augsburg, Corunna, Stockholm, Nijni Novgorod, Xeres.

III. Account for the following:—

(1) that in Madras the wind generally blows from the N.E. from October to April, and from the S.W during the rest of the year;

(2) that the climate of Madeira is so equable;

(3) that the tops of high mountains are often snow-clad;

(4) that Malabar experiences such a heavy rain-fall;

(5) that the district of Tanjore is so fertile.

IV. Give a short account of New Zealand under the following heads:—(1) Physical features; (2) Climate; (3) Inhabitants; (4) Products, mineral and vegetable; (5) Government and Political Relations.

V. Give the *boundaries* and chief *exports* and *imports* of Bolivia, Victoria, Egypt, and Persia.

VI. (*a*) Name *two* of the principal districts or provinces in India noted for the following products—*tea*, *indigo*, *cotton*, and *opium*.

(*b*) What are the principal articles of *export* from Calicut, Tuticorin, Cocanada, and Karachi.

VII. Draw a map of the United States of America and mark thereon—

(1) the mountain and river systems, and the lakes.

(2) the following towns—inserting clearly under each the circumstances for which each is noted:—

Washington, New York, Philadelphia, Boston, Cincinnati, Baltimore, New Orleans, Pittsburg, Chicago, San Francisco.

N B.—No marks will be assigned unless the map be *neat* and *clean* and sketched with a *fair* degree of *accuracy*.

FIRST EXAMINATION IN ARTS, 1885.

TUESDAY, 15TH DECEMBER, 10 A M. TO 1 P M

ENGLISH POETRY.

I (1) Shakspere represents Cæsar as influenced by superstition, yielding to flattery, and thinking of himself as almost superhuman. Refer to the passages in your Play in which these features of Cæsar's character are brought out.

(2) Dowden says of Brutus, "His public action is a series of practical mistakes." Mention the practical mistakes into which Shakspere represents Brutus as falling.

II. (1) Enumerate very briefly the circumstances and objects which Milton represents as yielding pleasure to L'Allegro in the early morning, and name the English authors whose works are included among those studied by Il'Penseroso 'in some lonely tower' at midnight.

(2) What account of the origin of Arthur did Bleys give to Queen Bellicent?

III. (1) Paraphrase the following passages:—

(*a*) The abuse of greatness is, when it disjoins
Remorse from power: and to speak truth of Cæsar,
I have not known when his affections sway'd
More than his reason.

(*b*) There are no tricks in plain and simple faith;
But hollow men, like horses hot at hand,
Make gallant show and promise of their mettle;
But when they should endure the bloody spur
They fall their crests, and, like deceitful jades,
Sink in the trial.

(*c*) And the mute silence hist along,
'Less Philómel will deign a song

In her sweetest saddest plight,
Smoothing the rugged brow of Night,
While Cynthia checks her dragon-yoke
Gently o'er the accustom'd oak.

(*d*) How dull it is to pause, to make an end,
To rust unburnish'd, not to shine in use!
As tho' to breathe were life.

(*e*) The old order changeth, yielding place to new,
And God fulfils himself in many ways,
Lest one good custom should corrupt the world.

(2) Explain (*a*) passions of some difference, (*b*) the dint of pity, (*c*) familiar instances, (*d*) some snatch of honour, (*e*) unreproved pleasures, (*f*) shallow-searching Fame, (*g*) married brows, (*h*) to drink life to the lees, (*i*) drops of onset, and (*j*) the verge of dawn.

IV (1) Give the meaning in which the italicised words are used in:—

(*a*) Be factious for redress of all these *griefs*.

(*b*) He is *address'd*: press near and second him.

(*c*) Is it *physical* to walk unbraced?

(*d*) *Censure* me in your wisdom.

(*e*) Every shepherd *tells* his *tale*.

(*f*) *Secure* delight.

(2) What expression does Shakspere use for (*a*) tears, (*b*) epilepsy, and (*c*) the sky; what epithet is applied by Milton to (*a*) mirth, (*b*) the dawn, and (*c*) sleep; and to whom or to what does Tennyson apply each of the following—(*a*) the abominable, (*b*) the Greek woman, (*c*) the traitor of thine house, (*d*) the moving isles of winter, and (*e*) the slowly-fading mistress of the world?

V. (1) (*a*) Fear him not, Cæsar; he's not dangerous;
He is a noble Roman and well-given.

What reasons does Cæsar give for thinking the person here referred to dangerous?

(*b*) Fairest—why fairest wife? am I not fair?

What is Œnone's answer to her own question?

(2) To what does Tennyson liken the pale face of the dying Arthur? Quote or refer to passages in your text parallel to the following:—

(*a*) Speak of me as I am; nothing extenuate,
Nor set down aught in malice.

(*b*) Melancholy, silent maid
With leaden eye that loves the ground.

(*c*) This is the golden chain of love, whereby the whole creation is bound to the throne of the Creator.

VI (1) Write short notes on (*a*) the Cynosure of neighbouring eyes, (*b*) the drudging goblin, (*c*) the rainy Hyades, and (*d*) the brand Excalibur.

(2) Explain very briefly the following allusions:—

(*a*) The celestial Sirens' harmony,
That sit upon the nine enfolded spheres.

(*b*) As yonder walls
Rose slowly to a music slowly breathed.

(*c*) Such times have been not since the light that led
The holy Elders with the gift of myrrh.

VII. (1) Point out any peculiarities of construction in:—

Bru. She is dead.
Cas. Upon what sickness?
Bru. Impatient of my absence,
And grief that young Octavius with Mark Antony
Have made themselves so strong.

(2) Explain grammatically *yclep'd* and *a-Maying*; and give the construction of *while* and *he* in the expressions 'woe the *while*' and 'save only *he*.'

TUESDAY, 15TH DECEMBER, 2 TO 5 P.M.

ENGLISH PROSE.

Scott's Quentin Durward: Green's Readings, Part III.

1. Name five leading traits in the character of Louis XI and illustrate each by some incident in his career.

II. Describe the interview between Louis XI and the Envoy from the Duke of Burgundy. State the various demands made by the ambassador on behalf of his master and the replies of the king.

III. (*a*) Give the derivation, the history and the meaning of the following words:—*gossip, runagate, paladin, cicerone, esquire, cardinal.*

(*b*) Explain the following terms:—*langed and dentated gules bar sinister, pursuivants, procès verbal.*

IV. Give the meaning of each of the following extracts and the context in which it occurs:—

(1) Better kind fremit than fremit kindred.

(2) Here they are like to meet short shrift and a tight cord.

(3) Thy quick brain can speedily find some substitute for this sacrifice—some ram to be offered up instead of that project which is dear to me as the Patriarch's only son was to him.

(4) No, no, Sir Philip, I was no such fool as to cast pearls before swine.

(5) The poor man goes on like drunkards who only look to the other pot, and not to the score which mine host chalks up behind the lattice.

(6) Shew him a coat .. . and if he fails I promise him that his back shall be gules, azure and sable.

V. (*a*) Each of the following extracts was intended by the speaker to have two meanings. In each case show clearly what these were:—

(1) "My gossip hath somewhat an ugly favour to look upon at the first; but those who become acquainted with him, never are known to complain of him."

(2) Said Duke Charles "The cause in which I couch my lance against Orleans, must be fair and straight."

(3) "My journeys are always short and straight. When you and others Seignor Archer go by the bow, I always go by the cord."

(*b*) Point out the allusions in :—*like Homer's lotus-eaters, a countenance which resembled that of Melpomene, this vagrant Helen of Troy, this playing the Allegro, that the Penseroso.*

VI. Describe such of the feudal customs of the 15th century as are illustrated by the relations of the Duke of Burgundy and Louis XI to the Countess of Croye.

VII. (*a*) Describe the peculiar merits of the Pilgrim's Progress which have made it "probably the most popular and the most widely known of all English books."

(*b*) What were the causes that led to, and what were the main features of, the Reform Bill of 1832 ?

VIII. (*a*) Write short explanatory notes on :—

(1) He bandied repartees on equal terms with Sedley or Buckingham.

(2) His shrewdness laughed his grandfather's theories of Divine Right down the wind.

(3) A declaration adopted instantly by all put Napoleon to the ban of Europe.

(*b*) Explain the nautical terms :—*studding sails, booms, cockpit, tiller-ropes.*

IX. Expand the following summary into a brief account of the capture of Quebec by Wolfe. *Night, silence, the rushing tide, veteran discipline, the sure inspiration of genius had been his allies ; his battle-field, high over the ocean river, was the grandest theatre for illustrious deeds ; his victory one of the most momentous in the annals of mankind.*

WEDNESDAY, 16TH DECEMBER, 10 A.M. TO 1 P.M.

ENGLISH LANGUAGE.

I. Paraphrase the following passage :—

[Cæsar's apostrophe to the head of Pompey in Egypt,]

Oh thou conqueror,
The glory of the world once, now the pity ;
Thou awe of nations, wherefore didst thou fall thus ?
What poor fate followed thee and plucked thee on

To trust thy sacred life to an Egyptian?—
Thy life and light of Rome to a blind stranger
That honorable war ne'er taught a nobleness,
Nor worthy circumstance showed what a man was?—
That never heard thy name sung but in banquets
And loose lascivious pleasures?—to a boy
That had no faith to comprehend thy greatness,
No study of thy life to know thy goodness?

* * * *

Egyptians, dare ye think your highest pyramids,
Built to outdure the sun, as you suppose,
Where your unworthy kings lie raked in ashes,
Are monuments fit for him? No, brood of Nilus,
Nothing can cover his high fame but heaven;
No pyramids set off his memories,
But the eternal substance of his greatness,—
To which I leave him.

II. Read the two following quotations, and write such an essay as they suggest to you—

[*Note.*—The value of your production will depend on correctness of expression and of idiom, and on its clearness and conciseness.]

"To lavish on his work all that he had to give; to toil on, against the advice of physicians; to shorten, if need be, his life by a year, in order that his History might be longer by a volume,—were sacrifices which he was ready to make, like all men who value their time on earth for the sake of what they accomplish, and not of what they enjoy." TREVELYAN, *Macaulay's Life and Letters.*

"Better fifty years of Europe than a cycle of Cathay."
TENNYSON,
Locksley Hall.

III. Analyze the following, adopting a tabular scheme of arrangement:—

When gentle winds but ruffle the calm sea,
My breast courageous grows, and earth to me
Dear as enticing ocean cannot be;
But when the great main roars, and white with foam
Huge waves tower up from it, and bellowing come
To burst on land, I wistful seek a home
In groves retired, where, when the storm descends,
It brings but music to the pine it bends.

IV. Explain what, in the structure of sentences, is meant by 'antithesis,' and what by 'balance'—Quote one, and form one example of each.

State also what other resources there are for producing effect in the English sentence. Illustrate by one example in each case.

V. Distinguish between—alleviate, mitigate, relieve. Write also one illustrative passage including the three words.

VI. Give as exhaustive a note as you are able on the various uses of 'it' in the English sentence.

VII. Form one sentence beginning with 'no sooner,' and another beginning with 'the sooner,' and parse *the* and *no* as so used

VIII. Give fully the grammatical relations of each word in *italic* in the following:—

(*a*) *Not* a flower
But *shows* some touch in freckle, streak, or stain,
Of His unrivalled pencil.

(*b*) Happy who walks with Him! *Whom* what he finds
Of flavour or of scent in fruit or flower,
Or *what* he views of beautiful or *grand*
In nature, from the broad majestic oak
To the green blade that twinkles in the sun,
Prompts with remembrance of a present God.

(*c*) One and all rejoiced in the successful issue of an undertaking for the sake of which he had surrendered more than others could ever hope *to win*

IX. Re-write the following, correcting anything you consider inaccurate, and give your reasons in each case:—

(*a*) He was a good teacher, but being a bad disciplinarian his pupils profited but little.

(*b*) At present I use to furnish such statement.

(*c*) My old friend, after having seated himself and trimmed the boat with his coachman, who, being a very sober man, always serves for ballast on these occasions, we made the best of our way to Foxhall

X. Give in your own words the meaning of the last (c); also of the two following:—

(1) As old Demosthenes said, the power of oratory is as much in the ear as in the tongue.

(2) She is most provokingly humble and ostentatiously sensible to her inferiority.

XI. Give clearly, in your own words, the meanings of the words in *italic* in each of the following:—

(*a*) Thinking discretion the better part of valour, he *took to his heels.*

(*b*) It is not uncommon with a certain class of reviewers to *run* every new author *down.*

(*c*) An inspection soon showed the state of the case, everything being *at sixes and sevens.*

(*d*) He thought to carry the matter through by *putting a good face* on it.

(*e*) With a view to securing his ends, he *made up to* those he deemed most influential.

XII. Reconstruct the following in the manner indicated, making only *necessary* changes:—

(1) "We learn too from the telescope that, even in this province, the variety of nature is not exhausted"—Begin this, first, with 'The telescope'.—Secondly, with 'The variety.'

(2) "The constitution of seeds is still more admirable than their preservation." Put the last word in place of the second, and make the other changes thus rendered necessary to bring out the same meaning.

WEDNESDAY, 16TH DECEMBER, 2 TO 5 P.M.

PHYSIOLOGY.

I. State the number and arrangement of the Milk teeth. At what ages do the first Milk teeth and first Permanent teeth respectively appear? What is the function of the teeth?

II. What do you mean by the Alimentary Canal? Enumerate the digestive juices and state where each enters the Alimentary tract. Give a brief description of the purpose served by each in the digestion of food.

III. What do you mean by the Pulse? What is its normal rate? What evidence is there of the circulation of the blood? In which parts of the circulation are valves found? What would happen if there were no Mitral valve?

IV. How is the heat of the body generated, and how is it regulated? What is the normal temperature of the body? Does it vary at all in health, and if so, how?

V. What tissues are found in the human body? What is a cell and of what are cells formed?

VI. What does bone consist of? How does it differ from all other human tissues, how is it formed and what are its uses?

VII. Describe the functions of the liver.

VIII. Describe the changes which take place in air during respiration.

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

SANSKRIT: TEXT-BOOKS AND GRAMMAR.

I. (*a*) Write out the combined formation by Sandhi of the following:—

पुनः	+	रमते
तव	+	छाया
भोः	+	अधीहि
तान्	+	टिट्टिभान् ..
स्वामिन्	+	दृढ
प्र	+	नष्टः

(*b*) Give the 3rd case plural of दुह् *m*, उपानह् *m*, जरा *f*, and ककुभ् *f*.

(*c*) Give the 2nd case plural of शुश्रुवस् *m*, पथिन् *m*, स्त्री *f*, and प्रत्यच् *m*.

(*d*) Give the comparative and superlative of गुरु, दीर्घ, युवन् and प्रिय

(*e*) Give the ordinals and cardinals for 4, 9, 50, and 81.

II. (1) Give the 2nd person singular in (लिट्) parasmaipada of दृ, सु, (मृ,) to die, पच् and सृज्.

(2) Give the 2nd person singular in लोट् parasmaipada of श्रु, हु, to sacrifice, and घ्रास्.

(3) Give the 3rd person singular in लुङ् of वह् *p*, नी *p* to lead, सु *p* to praise, या *p* to go, and अधि + इ to study.

(4) Give the 3rd person singular लट् of पू *p* to purify, नम् *p* to bow, ग्रह् *p* to take, and श्रु *p* to hear, in the active, the passive, the causative (णिच्) and the desiderative (सन्) forms.

(5) Give the 3rd person singular लट् of the frequentative (यङ्) of बुध् to know.

(6) Distinguish between उदस्थात् and उदस्थित.

III. (*a*) What is the force of the affix in अंसद्वयस, विप्रसात्, दाशरथिभूय, सुराजंभवं, गजता, दक्षिणीय, राजक.

(*b*) Contract the following expressions into a compound word

महान् राजा, ऋक्च यजुश्च अहश्चनिशाच.

(*c*) Dissolve the underlined compound words —

उत्सेधनिर्धूतमहीरुहां ध्वजै-
र्जनैर्घरद्धोद्धुतसिंधुरंहसाम् ।
नागैरधिच्छिन्नमहाग्निलं मुहु-
र्बलं बभूवोपरि तन्महीभृताम् ॥

IV Give the meaning of वल्ग, कश्मा, दूष्य, कंकत, जामि, प्रतिघ, ययु, आश्रव, उष्ट्रिका, सर्वपथीन, विशिखा, क्षुष्टसमीक्षत, भारवाहण, वृतो.

V (*a*) Explain the peculiarity in the use of the 6th case in the following :—

(1) विप्रहन्तुममरेशविद्विषामर्थितः स्वयमथ-
स्वयंभुवा ।
संप्रति श्रयति पुत्रतामयं कश्यपस्य जनतातिवर्तिनः ॥

(2) मृगविद्विषामिव यदित्थमजनि मिषतां पृथा-
सुतैः ।
अस्य वनगुन द्वापचितिः परिभाव एष
भवतां भुवोऽधिपाः ॥

(b) And of the 4th case in तृणाय कुरुपतिमभ्यसूत.

(c) Distinguish between अलं सेवया and अलं सेवायै.

VI. Give the meaning of the following :—

(1) दयितं जनः खलु गुणीतिमन्यते ॥

(2) परवृद्धिमत्सरि मनो हि मानिनाम् ॥

(3) स्फुटमापदां पदमनात्मवेदिता ॥

(4) महतां हि सर्वमथवा जनातिगम् ॥

(5) सोऽहमंशुमतेव सगरः प्रत्याहृताश्वो यज्ञये ॥

(6) अपि सुखं सख्यै ॥

(7) अपि स्मरेदस्मदभ्यर्थनाम् ॥

(8) अविषोऽपिकदाचिद्दंशोभवेत् ॥

(9) ननु तत्रैव देवी ॥

(10) ननु पर्युत्सुका एव वयम् ॥

(11) गृहीतत्वणो भव ॥

(12) किं प्रपद्यते वैदर्भः ॥

(13) मया तीर्थादभिनयविद्या शिक्षिता ॥

(14) लब्धास्पदोऽस्मीति विवादभीरो-
स्तितिक्षमाणस्य परेण निन्दाम् ।
यस्यागमः केवलजीविकायै
तं ज्ञानपण्यं वणिजं वदन्ति ॥

What is the allusion in (5).

VII (1) Who deserve Arghya ?

(2) Who is called सरित्सुत and why ?

(3) Why are the Pándavás called उपपतिसुताः ?

(4) How does Sisupála explain the following epithets of Krishna :— मधुसूदन, चक्रधर, विक्रमिन् and नरकजित्.

(5) Mention five Avatáras of Vishnu.

(6) What remedy is suggested for snake bite ?

(7) How does Vidushaka explain *his* being sent to set free Málaviká ?

(8) What is the popular belief regarding the formation of pearls, and the flowering of the Asoka tree ? To what use is the latter turned in the Málavikágnimitra ?

(9) Relate *briefly* the story of Málaviká before she was presented to Dhárini.

VIII Explain *shortly* the apparent meaning and the secret allusion of the following :—

(1) किंदर्दुराव्याहरंतीति देवः पृथिवींविस्मरति ॥

(2) सखे त्वत्मुनीतिपादपस्य पुष्पमुद्भिन्नमिदम् ॥

(3) न हि कमलिनीं दृष्ट्वा ग्राहमवेक्षते मतंगज.॥

(4) यो बिडालगृहीतायाः परभृतिकायाः ॥

(5) साधु रे पिङ्गलबानर साधु परित्रातस्त्वया स्वपत्न :

(6) अलमलमुपालम्भेन पत्तने विद्यमानेऽपि ग्रामे रत्नपरीक्षा ॥

(7) बन्धनभ्रष्टो गृहकपोतकश्चिल्लाया मुखे पतितः ॥

(8) हो हि हृयं मोधुपानोद्वेजितस्य मत्स्यखिड-कोपनता ॥

(9) चन्दनंखलु मया पादुकापरिभोगेन दूषितम् ॥

(10) स्नानीयवस्त्रक्रियया पत्रोर्णं वोपयुज्यते ॥

THURSDAY, 17TH DECEMBER, 2 TO 5 P M

SANSKRIT: TRANSLATION.

I Translate into Sanskrit:

Then beholding the king from a distance with his dress and ornaments, many Savaras, armed with various weapons, ran to plunder him When king Dharma saw that, he said to his daughter and wife, "The barbarians will seize on you first, so enter the wood in this direction." When the king said this to them, queen Chandravatí and her daughter Lávanyavatí, in their terror, plunged into the middle of the wood. And the brave king, armed with sword and shield, killed many of the Savaras who came towards him, raining arrows. Then the Chief summoned the whole village, and falling on the king who stood there alone, they slashed his shield to pieces and killed him; and then the host of bandits departed with his ornaments. And queen Chandravatí, concealed

in a thicket of the wood, saw from a distance her husband slain; so in her bewilderment she fled with her daughter and they entered another forest a long distance off. There, tired and sad, the queen sat down weeping with her daughter in a spot on the bank of a lotus lake, under the shade of an Aśoka tree.

II. Translate into English:

(a) यदपूपुजस्त्वमिह पार्थ मुरजितमपूजितं सताम्।
प्रेम विलसति महत्तदहो दयितञ्जनः खलु गुणीति मन्यते॥
यदराज्ञि राजवदिहार्घ्यमुपहितमिदम्मुरद्विषि।
याम्यमृग इव हविस्तदयम्भजते ज्वलन्मुन मही़श्वक्षिषु॥
अनृताङ्गिरं न गदसीति जगति पटहैर्विघुष्यसे।
निन्द्यमथ च हरिमर्चयतस्तव कर्मणैव विकसत्यसत्यता॥
तव धर्मराज इति नाम कथमिदमपण्डु पठ्यते।
भीमदिनमभिदधत्यथवा भृशमप्रशस्तमपिमङ्गलञ्जनाः॥
यदिवार्चनोयतम एष किमपि भवतान्मृषा सुताः।

भौरिरवनिपतिभिर्निखिलैरवमाननार्थमिह
किन्निमन्त्रितैः ॥

अथवा न धर्ममसुबोधसमयमवयातबालिशाः ।
काममयमिह वृथा पलितो हतबुद्धिरप्रणि-
हितः सरित्सुतः ॥

स्वयमेव यन्ननुतनूज यमपि गणमर्घ्यमभ्यधाः ।
तत्र मुरारिपुरयं कतमो यमनिन्द्यवन्दिवद् -
भिष्टुषे वृथा ॥

(b) सहस्रमिच्छति यती सहस्री लक्षमीहते ।
लक्षाधिपस्तथा राज्यं राज्यस्थःस्वर्गमीहते ॥

(c) जीर्यन्ति जिर्यतः केशा दन्ता जीर्यन्तिजीर्यतः
जीर्यतश्चक्षुषी श्रोत्रे तृष्णैका तरुणायते ॥

(d) लुब्धस्य नश्यति यशः पिशुनस्य मैत्री
नष्टक्रियस्य कुलमर्थपरस्य धर्मः ।
विद्याफलं व्यसनिनः कृपणस्य सौख्यं
राज्यं प्रमत्तसचिवस्य नराधिपस्य ॥

(e) ययोरेव समं वित्तं ययोरेव समं कुलम् ।
तयोर्मैत्री विवाहश्च न तु पुष्टविपुष्टयोः ॥

(f) संक्षेपात्कथ्यतेधर्मो जनाः किं विस्तरेणवः ।
परोपकारः पुण्याय पापाय परपीडनम् ॥

(g) पुराणमित्येव न साधु सर्वं
न चापि काव्यं नवमित्यवद्यम् ।
सन्तः परीक्ष्यान्यतरद्भजन्ते
मूढः परप्रत्ययनेयबुद्धिः ॥

(h) अक्षैरन्तर्निहितवचनैः सूचितःसम्यगर्थः
पादन्यासो लयमुपगतस्तन्मयत्वंरसेषु ।
शाखायोनिर्मृदुरभिनयस्तद्विकल्पानुवृत्तौ
भावोभावं नुदतिविषयाद्रागबन्धः सएव ॥

(i) उचितःप्रणयोवरंविहन्तुं
बहवःखण्डनहेतवोहिदृष्टाः ।
उपचारविधिर्मनस्विनीनां
नतुपूर्वाभ्यधिकोऽपिभावशून्यः ॥

(j) स्वस्ति यज्ञशरणात्सेनापतिः पुष्पमित्रोवैदिशस्यंपुत्रमायुष्मन्तमग्निमित्रंस्नेहात् परिष्वज्यानुदर्शयति। विदितमस्तु। योऽसौ राजयज्ञदीक्षितेनमया राजपुत्रशतपरिवृतंवसुमित्रंगोप्तारमादिश्य वत्सराय

निवर्तनीयो निरर्गलसुरङ्गमोविसर्जितः ससिन्धोर्
क्षिणेरोधसिचरन्नश्वानीकेनयवनेनप्रगृहीतः । ततउभ
योः सेनयोर्महानासीत्समर्दः ॥

N.B. चर्मन् a shield; व्यसनिन् addicted to any kind of vice; तरुणाय nominal verb, Atmanep., to remain young or fresh. क्रिया (in नष्टक्रिय) Purificatory rites, as ablution, &c. प्रमत्त careless, erring; कृपण miserly, stingy.

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

LATIN: TEXT-BOOKS AND GRAMMAR.

I. (*a*) State the gender of cos, adamas, virus, nurus, ordo, fortitudo, margo, vomis, caro, pecten. Give the feminine of senex, patruus, bos, nepos, Thrax, Tantalides (*genit. dæ*); and the masculine of felis, capella, ancilla, noverca.

(*b*) The following are defective nouns, decline them in the singular only:—Verbera, ambages, fors, vices. Which of them have no plural? Remark on *pauco* in "foramine *pauco*" and *frugi* in "*frugi* servus est."

(*c*) Decline Achilles, giving the double forms; and give the nominative plural of auster, prosper; the genitive singular of Ilion, Ixion, servitus, văs, vās, Ceres, adeps, supellex; the nominative singular of præsides, cœlites, suibus, aucupem, Pana, roris; the genitive plural of vis, nix, dos, seges; the ablative and accusative singular of tussis, tigris, and volucris.

(*d*) Compare parvus, frugi, nequam, egenus, facilis, amabilis, idoneus, audacter.

(*e*) Give the Latin for "28 each," "the 99th," "17 times," and "$\frac{1}{4}$th." What fraction is "quinque partes"? Remark on "una castra," and "trinis castris."

(*f*) Give the perfect of algeo, capesso, cogo, deleo, fallo, lino; the infinitive of fulcio, and fugio; the supine of volvo, tono, veho, torreo, tollo, surgo, sperno, scindo: and the 1st singular present indicative of pepigi, pransum, quassum, satum, torsi.

II. (*a*) What cases respectively do the following govern:—Gratus, instar, careo, occurro, memini, similis, invideo, ignarus, ignosco, potior?

(*b*) Subordinate the sentence "Qui hoc dicet, errabit" to the following sentences respectively:—

(i) Non dubito quin . . . . .

(ii) Non dubitabam quin . . . . .

(iii) Credo eum . . . . .

(iv) Credebam eum . . . . .

III. (*a*) Put the following into *Oratio Obliqua*:—

Domuisti Cæsar gentes immanitate barbaras, multitudine innumerabiles, locis infinitas, omni copiarum genere abundantes, sed tamen ea vicisti quæ et naturam et conditionem ut vinci possent habebant; nulla est enim tanta vis tantaque copia quæ non ferro ac viribus debilitari frangique possit. Verum animum vincere, iracundiam cohibere, victoriam temperare, si quis sciat, non ego eum summis viris comparo, sed simillimum Deo iudico.

On what occasion was the above spoken, and with what object?

(*b*) Put the following into *Oratio Recta*:—

Orabant, ne se oriundos Etruscis eiusdem sanguinis nominisque, egentes exsulare pateretur: nunc monebant etiam, ne orientem morem pellendi reges inultum sineret. Satis libertatem ipsam habere dulcedinis. Nisi quanta vi civitates eam expetant, tanta regna reges defendant, æquari summa infimis; nihil excelsum, nihil quod supra cetera eminent in civitatibus fore: adesse finem regnis * * *.

IV. Write brief notes on:—Patres conscripti, Rex sacrificulus, Pontifex, Vindicta, Lars, Portoria, Colonia, Clientes, Nexi, Ludi Magni.

V. (*a*) Write a brief explanatory note on:—"Castoris Ædes eodem anno Idibus Quintilibus dedicata est," and give the month and day according to the English calendar. State briefly how the days of the month

were reckoned among the Romans, with the differences for each month, and translate into Latin.—The 4th of June A.D. 1885.

(*b*) "Non enim *populi* sed *plebis* eum magistratum esse." Distinguish between these two.

(*c*) Translate: "Ardens igitur irâ *tribunus viatorem* mittit ad *Consulem*, consul *lictorem* ad tribunum, privatum esse clamitans, sine *imperio*, sine magistatu," adding such notes on the words italicised as shall give a clear idea of the powers and offices mentioned.

(*d*) Translate and explain the allusions in "* * * * * prætextam curulemque sellam nihil aliud quam pompæ funeris putent, claris insignis velut infulis destinari * * * *"

VI. State of whom the following are spoken, and explain the allusions:—

(i) "Omnes quos oderat, morte mulctabat. Ipse iubebat occidi, nullo postulante, præmiis etiam invitabat: quæ tamen crudelitas ab hoc eodem aliquot annis post, quem tu nunc crudelem esse vis, vindicata est."

(ii) "Quando tua * * * quid arma voluerunt, nisi a te contumeliam propulsare."

(iii) "Domi una eruditi, militiæ contubernales, post affines."

(iv) "Rex potentissimus inimicus huic causæ."

(v) "Fac igitur quod de homine nobilissimum et clarissimum fecisti nuper in curia."

VII. Write brief notes, mostly grammatical, on the following, with reference to the words italicised:—

(i) Aut *oculis capti* fodere cubilia *talpæ*
Inventusque cavis bufo.

(ii) Libra *die* somnique pares ubi fecerit horas.

(iii) Nec non et lini segetem et cereale *papaver*
Tempus humo *tegere*.

(iv) Per *duodena* regit mundum Sol aureus astra.

(v) Ipsa dies *alios* alio *dedit ordine* Luna
Felices operum . . . . . .

(vi) Omnis *quam chorus et socii* comitentur ovantes.

(vii) *Haud equidem credo* quia *sit divinitus* illis Ingenium aut *rerum fato prudentia maior.*

(viii) At si virgineum suffuderit *ore* ruborem.

(ix) Telephus et Peleus, quum *pauper* et *exul* uterque *Proiicit* ampullas.

VIII. Translate and explain the allusions in :—

(1) . . . . . Cinctutis non exaudita Cethegis.

(2) Terra Neptunus classes aquilonibus arcet
Regis opus sterilisque diu palus, aptaque remis
Vicinas urbes alit et grave sentit aratrum.

(3) Nec reditum Diomedis ab interitu Meleagri.

(4) Spondeos stabiles in iura paterna recepit
Commodus et patiens; non ut de sede secunda
Cederet aut quarta socialiter.

Also (5) "Caena Thyestæ," "Iratusque Chremes," and "Scriptor Cyclicus."

IX. (*a*) Give the Latin for who? what? where? whither? why (i = for what purpose? ii = from what cause?)? when? how? how long? how often? how much? how many?

(*b*) Correct, if you think necessary—

(i) "Lubet me in hunc domum habitare."

(ii) "Estne aliquis qui putat doctrina animum nocere?"

(iii) "Hæc imperia parere solebant."

(iv) "Ille ab eo hortatus est cum rege in gratia redire."

(v) "Dixit eum nuper nupsisse."

(vi) "Studere non potes sine discendum."

X. Translate into Latin :

(1) The fugitive entered a house without knowing whose it was.

(2) I left James instead of John.

(3) This shoe is too large for the foot.

(4) I cannot repent of my fault.

(5) This word is not to be found in any good author.

(6) He thought it was like an inconsiderate, not a generous man, to promise what he could not perform.

THURSDAY, 17TH DECEMBER, 2 TO 5 P.M.

LATIN: TRANSLATION.

I. Translate into English:

(*a*) Contemplator item, cum se nux plurima silvis
Induet in florem et ramos curvabit olentes.
Si superant fœtus, pariter frumenta sequentur,
Magnaque cum magno veniet tritura calore;
At si luxuria foliorum exuberat umbra,
Nequiquam pinguis palea teret area culmos.
Semina vidi equidem multos medicare serentes
Et nitro prius et nigra perfundere amurga,
Grandior ut fetus siliquis fallacibus esset,
Et, quamvis igni exiguo, properata maderent.

(*b*) Tum cornix plena pluviam vocat improba voce
Et sola in sicca secum spatiatur arena.
Ne nocturna quidem carpentes pensa puellæ
Nescivere hiemem, testa cum ardente viderent
Scintillare oleum et putres concrescere fungos.
Nec minus ex imbri soles et aperta serena
Prospicere et certis poteris cognoscere signis:
Nam neque tum stellis acies obtunsa videtur,
Nec fratris radiis obnoxia surgere Luna,
Tenuia nec lanæ per cælum vellera ferri;
Non tepidum ad solem pennas in litore pandunt
Dilectæ Thetidi alcyones, non ore solutos
Immundi meminere sues iactare maniplos.

(*c*) Ex noto fictum carmen sequar, ut sibi quivis
Speret idem, sudet multum frustraque laboret
Ausus idem: tantum series iunctura pollet,
Tantum de medio sumptis accedit honoris.
Silvis deducti caveant me iudice Fauni,
Ne velut innati triviis ac pæne forenses
Aut nimium teneris iuvenentur versibus unquam,
Aut immunda crepent ignominiosaque dicta;
Offenduntur enim, quibus est equus et pater et res,

Nec, si quid fricti ciceris probat et nucis emptor,
Æquis accipiunt animis donantve corona.

(*d*) Quintilio si quid recitares, Corrigo sodes
Hoc, aiebat, et hoc: melius te posse negares,
Bis terque expertum frustra, delere iubebat
Et male tornatos incudi reddere versus.
Si defendere delictum quam vertere malles,
Nullum ultra verbum aut operam insumebat inanem,
Quin sine rivali teque et tua solus amares.
Vir bonus et prudens versus reprehendet inertes;
Culpabit duros, incomptis allinet atrum
Transverso calamo signum, ambitiosa recidet
Ornamenta, parum claris lucem dare coget,
Arguet ambigue dictum, mutanda notabit,
Fiet Aristarchus; non dicet: Cur ego amicum
Offendam in nugis? Hæ nugæ seria ducent
In mala derisum semel exceptumque sinistre.

(*e*) Tres fuere sententiæ. P. Virginius rem non vulgabat: de iis tantum, qui fidem secuti P. Servilii consulis, Volsco Sabinoque militassent bello, agendum censebant. T. Lartius, non id tempus esse, ut merita tantummodo exsolverentur. Totam plebem aere alieno demersam esse · nec sisti posse, ni omnibus consulatur. Quin, si alia aliorum sit conditio, accendi magis discordiam, quam sedari.

Ap. Claudius, et natura immitis et efferatus hinc plebis odio, illinc Patrum laudibus, non miseriis, ait, sed licentia tantum concitum turbarum: lascivire magis plebem quam sævire. Id adeo malum ex provocatione natum quippe minas esse consulum, non imperium; ubi ad eos, qui una peccaverint, provocare liceat. 'Agedum,' inquit, 'dictatorem, a quo provocatio non est, creemus. Jam hic, quo nunc omnia ardent, conticescet furor. Pulset tum mihi lictorem, qui sciet ius de tergo vitaque sua penes unum illum esse, cuius maiestatem violarit.'

(*f*) Illum non minæ plebis, non senatus preces perpellere unquam potuere, non modo ut vestem mutaret aut supplex prensaret homines, sed ne ut ex consueta quidem asperitate orationis, quum ad populum agenda causa esset, aliquid leniret atque submitteret. Idem habitus oris, eadem contumacia in vultu, idem in oratione spiritus erat: adeo ut magna pars plebis Appium non minus reum

timeret, quam consulem timuerat. Semel causamdixit, quo semper agere omnia solitus erat, accusatorio spiritu, adeoque constantia sua et tribunos obstupefecit et plebem, ut diem ipsi sua voluntate prodicerent; trahi deinde rem sinerent.

(*g*) Quod si probare Cæsari possemus in Africa Ligarium omnino non fuisse, si honesto et misericordi mendacio saluti civi calamitoso esse vellemus, tamen hominis non esset, in tanto discrimine et periculo civis refellere et redarguere nostrum mendacium, et, si esset alicuius, eius certe non esset, qui in eadem causa et fortuna fuisset. Sed tamen aliud est errare Cæsarem nolle, aliud nolle misereri. Tunc diceres: Cæsar, cave credas: fuit in Africa, tulit arma contra te. Nunc quid dicis? Cave ignoscas. Hæc nec hominis nec ad hominem vox est, qua qui apud te, Cæsar, utitur, suam citius abiiciet humanitatem quam extorquebit tuam.

(*h*) Hæc igitur tibi reliqua pars est: hic restat actus, in hoc elaborandum est, ut rem publicam constituas, eaque tu in primis summa tranquillitate et otio perfruare: tum te, si voles, quum patriæ quod debes solveris et naturam ipsam expleveris satietate vivendi, satis diu vixisse dicito. Quid enim est omnino hoc ipsum diu, in quo est aliquid extremum? Quod quum venit, omnis voluptas præterita pro nihilo est, quia postea nulla est futura.

(*i*) (Not from text-books.)

(*a*) Vis erat in eo viro imperii ingens pariter in socios civesque. Prænestinus prætor per timorem segnius ex subsidiis suos duxerat in primam aciem; quem quum inambulans ante tabernaculum vocari iussisset, lictorem expedire securim iussit. Ad quam vocem exanimi stante Prænestino, 'Agedum, lictor, excide radicem hanc,' inquit, 'incommodam ambulantibus,' perfusumque ultimi supplicii metu, mulcta dicta, dimisit.

(*b*) Omnia nunc florent; nunc est nova temporis ætas;
Et nova de gravido palmite gemma tumet;
Et modo formatis amicitur vitibus arbos;
Prodit et in summum seminis herba solum;
Et tepidum volucres concentibus aera mulcent;
Ludit et in pratis luxuriatque pecus;
Tum blandi soles; ignotaque prodit hirundo;
Et luteum celsa sub trabe fingit opus;
Tum patitur cultus ager, et renovatur aratro;
Hæc anni novitas iure vocanda fuit.

II. Translate into Latin:

He plainly told him, that if, under the present circumstances, he should undertake a war against the Romans, he would run into his own ruin. He was the only one that spoke thus; and some miserable creatures at the Court of Antiochus very soon persuaded the king that Hannibal was a traitor and a partisan of the Romans, because he did not sufficiently value the power of the king. While Hannibal dissuaded him from the war, the Ætolians, with a senselessness which we often find among Greeks, urged him to come over to Europe as soon as possible and commence the war. Antiochus had more faith in them than in the warnings of Hannibal and accelerated the war instead of delaying it.

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

PERSIAN: TEXT-BOOKS AND GRAMMAR.

I. (*a*) Paraphrase:

* بمیخانه در سنگ بردن زدند *
* کدو را نشاندند و گردن زدند *
* روان خمر و چنگ اوفتاده نگون *
* تو گفتي شدست از بط کشته خون *
* شکم تا بنافش دریدند مشک *
* قدح را برو چشم خونین پر اشک *
* بفرمود تا سنگ صحن سراي *
* بکندند و کردند نوباز جای *
* که گلگونهٔ خمر یاقوت فام *
* بشستن نمي شد زروي رخام *
* عجب نیست بالوعه گر شد خراب *
* که خورد اندران روز چندان شراب *

(*b*) Scan any line of the above.

(c) Point out the صنعت in the last couplet.

(d) Give the meanings of the underlined حروف and also state their grammatical names.

(e) Analyse the last couplet.

II. Point out the figures of speech صنائع in—

(a) رازدار ارزاق ازل رزق آدم وروزي ذي دم
از روي ارادهٔ ذات در روز ازل در داده *

(b) امید که بعلم وعمل بهره یاب بوده بمرادِ دل برسد
بکرمه وجودهٔ *

(c) داورِ دادار سالکِ مسالک سداد موسس اساسِ
و داد محمد مراد را همواره محروس داراد *

(d) ازدیر دوستدارِ سراپا انکسار یاد نشده موجب آن
و رای عشرت دیگر نخواهد بود *

III. Explain the مُعمّا in the following couplet :—

* گر تو مي خواهي که يا بي نام آن سيمين ذقن *
* قلبِ قلب قلب را بر قلبِ قلبِ قلب زن *

IV. (a) Point out the name of محمد شاکر in the following :—

جبين مروت و حق شناسي را بلمعان اوج معني
و غايت سداد نوراني ساخته - و ازروي شيرين زباني
و اخلاق ذاتي دل از شکر به نهايت مهرش پرداخته *

(b) What is the name of this صنعت

V. Define and illustrate :—

تشبیه مُمَثَّل - تشبیه تفضیل - استعارهٔ بالتصریح - استعارهٔ مرشحه - تعریض - اغراق - محتمل الضدین - اقتباس *.

VI. Explain :

* تني چند بر گفت او مجتمع *
* چو عالم نباشي کم از مستمع *
* چو سندان کسي سخت روئی نکرد *
* که خایسک تا دیب بر سر نخورد *
* نئي بوریا را بلندي نکو است *
* که خاصیت نیشکر خود درو است *
* تفاوت کند هرگز آب زلال *
* گرش کوزهٔ زرّین بود یا سفال *

هرگاه گردش دور دوار چون حروف خود از بساط سراپا نشاطِ قربِ حضور دور گرداند در زمانِ مفارقت یاد گاري بماند *

VII. Give the different readings (نسخه) in—

* سپر افکند شیر غران ز چنگ *
* نیندیشد از تیر باران سنگ *

VIII. Write in Persian a short account of Hatifi (هاتفي) (this is not to exceed one page).

IX. Distinguish between—

وعید and وعد : بلیغ and فصیح : درکات and درجات

X. Name all the kinds of—

بدل - مرکب - جمله (باعتبار اصل) دلالت - مجاز - نثر - مقلوب - لف و نشر *

XI. Give the English meanings of—

عیّوق - سرگرانی - لم و لا نُسَلِّم - شیر عرین - حشیش - ساتگین - امرِ معروف - سپر افکندن - نهی منکر - باد سنج - گروبردن - بریخ نوشتن - اَحْسَنْتَ - دامیار - عنکبوت - خایسک *

XII Each of the following has two or more meanings, name them :—

آهنگ - پرداختن - سفر - خوان - باز - گرفتن - شاطر - پوستین *

THURSDAY, 17TH DECEMBER, 2 TO 5 P.M.

PERSIAN: TRANSLATION.

I. Translate into Persian :

(*a*) It has been related to me, O happy king, said Shahrazád, that there was a certain merchant who had great wealth, and traded extensively with surrounding countries; and one day he mounted his horse, and journeyed to a neighbouring country to collect what was due to him, and the heat oppressing him he sat under a tree in a garden, and put his hand into his saddle-bag, and ate a morsel of bread and a date. Having eaten the date, he threw away the stone, when immediately there appeared before him an Efreet, of enormous height, who, approaching with a drawn sword, said, "Rise that I may kill thee." The merchant said, "Why?" He answered, "The date stone, thou didst throw away struck my son on the chest and he died." The merchant on hearing these words, exclaimed, "Verily to God we belong, and verily to Him we must return. If I killed him, it was not intentionally, and I trust thou wilt pardon me."

(*b*) After the close of the Punjab war and the annexation of that province by England, Dost Muhammad turned his attention to the extension of his Empire over Herat, and also north of the great chain of mountains. In 1850 he wrested Balkh from the Usbegs and later

on subdued Badakshan. He restored Cabul during his long reign to a high point of prosperity and left to his son and keir a kingdom which, if not so extensive as the first kingdom of the Duranis, was, at least, a fine territory.

(c) (1) Have you signed the cheque?
(2) Your son talks nonsense.
(3) Hang my coat on the nail.
(4) Blow out the light.

II. Translate into English:

(a) * يكي بر بطي در بغل داشت نمست *
* بشب بر سر پارسائي شكست *
* چو روز آمد آن نيک مرد حليم *
* بر سنگ دل برد يک مشت سيم *
* كه دوشينه مغرور بودي و مست *
* ترا و مرا بربط و سر شكست *
* مرا به شد آن زخم و برخاست بيم *
* ترا به نخواهد شد الّا بسيم *
* ازين دوستان خُدا بر سراند *
* كه از خلق بسيار بر سر خورند *
* سعادت به بخشايش داورست *
* نه در چنگ و بازوی زور آورست *
* چو دولت نه بخشد سپهر بلند *
* نيايد بمردانگي در كمند *
* نه سختي رسيد از ضعيفي بمور *
* نه شيران بسر پنجه خوردند و زور *
* چو نتوان بر افلاک دست آختن *
* ضروريست با گردشش ساختن *

* گرت زندگاني نبشت است دير . *
* نه مارت گزايد نه شمشير و شير *

(b) (مصرع) * بندگي بايد پيمبر زادگي منظور نيست *
نقابت پناها نجابت دستگاها باغواي جو فروشان گندم نما
بر شرافت که مرکب از شر و آفت است نظر
انداختن و بغرور مال و منال خود را پايمال جهالت
ساختن از پايهٔ اعتبار ار باب حالت افتادن و ابواب تلهف
و تاسف بر روي خود کشادن است - آري (بيت)
* مجردان طريقت به نيم جو نخرند *
* قباي اطلس آنکس که از هنر عاري است *
برادرم تا طالب صادق دل را از خيالات ذميمه خالي
نگرداند خود را بشرف تحصيل دولت علوم فيض لزوم
نرساند - در باب علم که ترکيب از عين و لم يافته مشعر
بر اين است که تا اين کس چشم بر نفي ندارد جوهر
مقصود بدست نيارد (ع) نه في را شناسد نه داند علي را
(بيت) * تاطبع نازکت نه پذيرد ملالتي *
* آن به که نامه را بدعا مختصر کنم *
توفيق کسب علم و حصول مراتب حلم ياورباد - عمرت
مزيد برب المجيد *

(c) * سفر کردهٔ اين سپنجي سراي *
* چنين بست بر ناقه زرين درای *
* که چون نيلگون ابر در نوبهار *
* علم برد بر دامن کوهسار *

* تمر خان به نيروي بخت قرين *
* بر آمد بر او رنگ کيخسروين *
* بکشور کشا يان فرخنده راي *
* بر آراست هنگامهٔ دل کشاي *
* زنا سازگاري داراي روم *
* که آلوده بودي نگينش بموم *
(گره در جبين داشت و کين در درون)
(پر از کينه بودش درون و برون)
(چنين حکم شد کزيسار و يمين)
(کند لشکري ساز يونان زمين)
(به اطراف لشکر بروم آورند)
(قيامت بان مرز و بوم آورند)
(مسخّر کند لشکر روم را *)
(چراغ کمان گيرد آن بوم را)

(d) مردي دعوي نبوت کرد او را گرفته پيش هارون رشيد بردند - هارون از وي پرسيد تو کيستي - گفت من پيغمبر برحق ام - پرسيد معجزهٔ تو چيست - گفت بر ضمائر مردم اطلاع دارم - پادشاه گفت اگر راست ميگوئي بگو حالا در خاطر من چيست - گفت در خاطر تو اين است که من دروغ مي گويم - پادشاه بخنديد و او را رها نمود *

(e) (۱) اين قليان نفس نمي دهد (۲) بلوني ترشي را بيار (۳) ايشان از سرما سياه شدند (۴) زود بر مي گردي يا خير (۵) ولش بکن *

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

URDU · TEXT-BOOKS AND GRAMMAR.

I. (۱) اِعراب اؤر علم عروض کا واضع کؤن تھا *

(۲) عروض کا لغوي اؤر اصطلاحي معنيٰ اؤر مناسبت درميان دونون کے بيان کرو *

(۳) پہلا شاعر اُردو مٿين کؤن ہوا *

II. (۱) ابيات مرتومةالذيل کي شرح سليس عبارت مٿين کيجئے *

(کب دکھاتا ہي ديدار وہ مطرب پسر)
(منہہ سے جو نکلا ترانہ لن تراني ہوگيا)
(کف پای حنائي تک بجا آنا ہي گيسو کا)
(نہين پنہان کہ ہي آتش پرستی کام ہندو کا)
(نزاکت يار کی ميري نقاہت جب کوئی تولے)
(جہکے ہرگز نہ يہہ پلہ نہ وہ پلہ ترازو کا)
(پاک طينت گلہ عيوب جيران دينی)
(استر کي کلہ کج نہاد مژگان دينی)
(دم نظارۂ عارض دہان يار بھي ديکھا)
(نشان قرآن مين ھمکو ہاتھہ آيا اسم اعظم کا)

(ب) پہلي بيت کي تقطيع کس طرح ہوئي *

(ج) دوسري بيت کي ترکيب کيجئے *

(د) تيسري بيت مٿين کيا صنعت ہي *

III. (a) ہر ايک لفظ ذيل کي معني انگريزي مٿين رقم کرو *

عقد مواخات باندھنا ـ خير مقدم ـ دائم الاختلاج ـ

مرافعه - جوزِ ہندي - الحق مر - اوج سعادت - شماتت اعدا - نان کشکين - لباس پوستين - خرگاہ - جوف درخت - موشگاف - مکنون - ہيمۂ سوختنی - بيّنه *

(b) بتلاؤ که مرقوم الذيل الفاظ کس زبان کے ہين اؤر ان کے کيا معنے ہين *

بلہوس - تالاش - متاتا پتا - جوہر - اقليدس - نگوڑا *

IV. اس قسم کے شعر کا نام کيا ہي *

* تجھ زلف کي پہر باس گئی جب سے ختن مين *
* اي نافۂ آہو * * پر مشک خطا سے *
* ہر غنچۂ دل تنگ ہوا پھول چمن مين *
* اي شوخ سمن بو * * تجھ مکھ کي ہوا سے *

V. ہر ايک دو يا تين لفظون مين کيا فرق ہي *

(۱) فعل و شبه فعل (۲) معما و چيستان (۳) رديف و قافيه (۴) استفہام استخباري - اقراري و انکاري *

VI. کب کسي نظم کو ماتحت کے القاب سے موسوم کرتے ہين يعنے ہر ايک لفظ کس مضمون کے نظم پر اطلاق کيا جاتا ہی *

حمد - نعت - مدح - منقبت - ہجو - واسوخت - مجرا - سلام - شہر آشوب - نوحه - مرثيه - تاريخ *

VII. ان کي تعريف کيا ہي *

صرف - نحو - بديع - زحاف - تقطيع - تميز - اسم سالم - ظرف مبہم *

VIII. تجنیس کی تعریف اوراس کے چند اقسام معہٗ مثال لکھو *

IX. کس لئے پہلی مثال مین لفظ لڑکا اوٗر آگاہ کا الف ے مجہول سے بدل ہوا اوٗر کس لئے دوسري مثال مین الف ے مجہول سے تبدیل نہ پایا *

(۱) لڑکے کتاب آگے رکھو (۲) میرا گھوڑا لاوٗ *

X. تمہارے درسي کتب کے مصنف کا تذکرہ مجملا تحریر کرو *

XI. بتلاوٗ کہ مرقومۃ الذیل الفاظ مین مذکر اوٗر مونث اوٗر مشترک کوٗن سے ہین - اوٗر ان کي تذکیر و تانیث کا قاعدہ اوٗر وجہ بھي لکھو *

دریا - پردہ - محکمہ - چلمچي - موٹي - گھي - کرسي - تقدیر - تدبیر - تعویذ - قدرت - حضرت - شربت - بلبل - فکر - جان - کوشش - دعا - تماشا - وفا *

THURSDAY, 17TH DECEMBER, 2 TO 5 P.M.

URDU: TRANSLATION AND COMPOSITION.

I. (a) Translate into Urdu:

The question was: Which of the two ought to be preferred: a king who was invincible in war, or a king who, without any experience in war, could administer civil government with great wisdom, in a time of peace? The majority determined this question in favor of the warrior; for skill to govern in a time of peace, said they, will be of but little use, if the king cannot defend his country in a time of war, since he will himself be divested of his authority, and his people will become slaves to the enemy. Others preferred the pacific prince; because, as he would have more to fear from a

war, he would be more careful to avoid it. My sentiments were then asked, and I answered thus:

Although he who can only govern either in peace or in war is but half a king, yet the prince who, by his sagacity, can discover the merit of others, and can defend his country when it is attacked, if not in person, yet by his generals, is, in my opinion, to be preferred before him who knows no art but that of war. A prince whose genius is entirely military, will levy endless wars to extend his dominions, and ruin his people to add a new title to his name.

(*b*) Render into appropriate Urdu:

(i) Prevention is better than cure.

(ii) Poor as I am, I am too proud to beg.

(iii) He is cut out for that work.

(iv) While Queen Elizabeth merited all the esteem of her people by her real virtues, she also engaged their affections by her pretended ones.

II. Subject of a short Essay in Urdu:

The effect of the failure of the monsoon.

موسمي بارش نه هو تو اس کي تاثير کيا هوگي *

III. مرقوم الذيل نثر و نظم کا ترجمه انگريزي مين کرو -

(*a*) کليله نے کہا که اول مصاحبت شير کي تيرے واسطے امر خيالي هي - اؤر بفرض محال اگر يهه بهي هوا مگر تو نے که ساري عمر پادشاه کا تقرب نهين پايا هي اؤر طريقهٔ آداب شاهي سے نابلد محض هي پس يهه سب شده ايک آن مين ناشده هو کے تيري جان کي هلاکت کا باعث هو جائيگا اؤر پهر تدارک بهي نهوسکيگا - دمنه نے کہا که جو شخص عاقل اؤر صاحب فضل هوتا هي اندک زمانے مين ماهر هر فن کا بن جاتا هي - جب که

مٹین آداب شاہي مین نظر کرتا ہونگا اؤر جو راہ و روش مقربان قدیم کي دیکھونگا پیٹروي سے قدم باھر نرکھونگا - یہہ وجہ کہا ہي کہ عتاب شیر کا مجھہ پر ہو - اؤر دوسرے یہہ ہی کہ ایسے باتین بے امداد غیبي مُیّسر نہین ہوتي ہین - جب کہ بخت مساعدت کرتا ہي اؤر پایۂ بلند پر پہنچاتا ہي تو خود بخود وہ آپ اتالیق ہو جاتا ہي - چنانچہ اخبار مین دیکھا ہي کہ آفتاب دؤلت ایک محترفۂ بازاري کا بلند ہوا آخر کار یہہ جہانداري کو پہنچا اؤر شہرہ اُس کي نظم و نسق کا عالم مین منتشر ہوا - ایک پادشاہ قدیم نے اسے لکھا کہ تو پیشۂ نجاري خوب جانتا تھا طریقہ مُلک داري کا کس سے سیکھا - اُس نے جواب لکھا کہ جس نے مجھے دؤلت و کامگاري عطا فرمائي اول دقایق جہانداري کے میرے لوح سینہ پر لکھہ دئے ۔

(b) (پتا قاصد یہي ہي بوستان کوي قاتل کا)
(چھٹا کرتا ہی فوّارہ گلوی مُرغ بسمل کا)
(حریصون کا شکم بھرتا ہي کوئي جمع دؤلت سے)
(کہ تاج زر پہ بھي رونا وھي ہي شمع محفل کا)
(کوئي ذرہ نہین ہي پر تو خورشید سے خالي)
(تماشا دیکھہ لے صحرا مین اسکے فیض شامل کا)
(گداز عشق نے سؤ بار دل کو کر دیا پانی)

(ہوا اب تک نہ شعلہ سرد لیکن آتش دل کا)
(فراق یار مین دیکھے وہ میرے دل کي بیتابي)
(تماشا جس کو منظور نظر ہو رقص بسمل کا)
(بجا ہي آسمان حسن هم تجھہ کو جو کہتے ہین)
(خط شب رنگ گرد رخ ہی ہالہ ماہ کامل کا)
(جو ظاہر مین عداوت ہو تو باطن مین محبت ہو)
(اسیر آنکھین لڑین پر دل سے ملنا چاہئے دل کا)

(c) (قمري ہي سرو سرو قد یار دیکھہ کر)
(گل عندلیب پھول سا رخسار دیکھہ کر)
(ڈرتا ہون میري طرح نہ حالت کرے تباہ)
(آئینہ کو وہ آئینہ رخسار دیکھہ کر)
(موسي مین اور مجھہ مین ہي اي حسن یا فرق)
(مین سن کے مشتري وہ خریدار دیکھہ کر)
(پایا نہ اس چمن مین کہین عشق بي طمع)
(بلبل ہي گرد گل کے تو زردار دیکھہ کر)
(هم کہا اسیر مفتي و قاضي بہک گئے)
(أنچي دکان حضرت خمار دیکھہ کر)

(d) بندگان سلطان محمود سے کتنے شخصون نے حسن میمندي سے پوچھا کہ پادشاہ نے آج تجھہ سے فلاني مصلحت مین کہا کہا - کہا اس نے کہ تمپر چھپا نرھیگا - بولے وے کہ تو وزیر ہي جو کچھہ تجھہ سے کہیگا هم سے نہ کہیگا - تب کہا اس نے

اس اعتماد پر کہ کسي سے نکہونگا پس کس
واسطے پوچھتے ہو تم *
(بیت) * ہر ایک بات سني کب کہے ہي اہل تمیز *
* وہ سرِ شاہ نہ کہولیگا جس کو سر ھي عزیز *

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

TAMIL: TEXT-BOOKS AND GRAMMAR.

I. (a) கூர்மபுராணமென்னும் பெயர்க்குக் காரணம் யாது ?

(b) அதன் முதனூல் யாது ? அதில் இராமாயண கதை வருவதற்குக் காரணம் என்ன ?

(c) அதைச் செய்தவரைப்பற்றி யென்ன தெரியும் ?

II. (a) அடியில் வரும் செய்யுட்களில் முதலிரண்டிற்குப் பதவுரையும் மூன்றாவதற்குப் பொழிப்புரையும் எழுதுக :—

(1) அன்னவனளித்தவெற்றிப் பகீரதனன்பினோடு
முன்னரும்பரவ முப்பானுயிரந் தவஞ் செய்காலைப்
பன்னருமறையோன் ரோன்றிப் பகீரதவிழைந்ததென்ன்
ன்னருங்கங்கையிந்த வுலகினிலுறுதல் வேண்டும்.

(2) மைந்தனும் வேண்டுமென்ன வளித்துவானதியீண்டெய்தின்
எந்தையை யன்றிமற்றுத் தரிக்குநரில்லை யென்ரு
நந்தலில் பரமனேக நாமவேல் குரிசிறுய
சந்திரமௌலியெய்த வளப்பினுட்டவஞ்செய்தானே.

(3) நீற்றெளிப்பழுத்த நெற்றி நிமலன்வந்தெய்
தக் கங்கை
யாற்றினீயளித்தியென்ன வருந்தவம் பெரிது
மாற்றப்
போற்றருங்கங்கையீசன் புரிசடைக்காட்டு
ளெய்தித்
தோற்றமின்றுசமன்ன னீசனைத் தொழுது
சொல்வான்.

(b) மேற்செய்யுட்களில் அடியிற் கோடிட்டவைகளுக்குச் சந்தி யிலக்கணங் கூறுக.

(c) உறுதல், தோற்றமின்றுக :—இச்சொற்களுக்குச் சொல்லிலக்கணம் முடிபுகளுடனே கூறுக.

(d) எச்தை, தரிக்குநர் :—இவைகளிலுள்ள இலக்கண விசேஷங்களை யெடுத்துக்காட்டுக.

(e) அரும் என்பது எவ்வகைச்சொல்? இது வேறு மொழியோடு புணரும்பொழுது எவ்வெவ்வகையாய்த் திரியும்? மேற்கண்ட செய்யுளில் வந்த இதன பிரயோகங்களையெல்லாம் எடுத்து எழுதி அவைகளிலுள்ள இலக்கண விசேஷங்களைச் சொல்லுக.

III. அடியில் வருவனவற்றிற்குப் பொருள் விளங்கக் கூறி, அவைகளில் முதல் மூன்றின் கதாசந்தர்ப்பத்தையும் எழுதுக :—

(1) நந்தலில் தன் மந்திரி முதற் பிறந்தார்.

(2) ஊறமிர்தெடுத்துத் தாயிற் குதவினள்

(3) தீதிலாறறி முனிவர்.

(4) வெள்ளநீர்ப்படப்பைசூழ் மிதிலைமாநகரம் புக்கார்.

(5) ஒற்றையாழியந் தடந்தேரூர்பவன் மைந்தன்.

(6) வீலங்கிற்கும் விள்ளலரிது.

IV. (a) கீழேவரும் பதங்கட்குப் பொருளெழுதுக :—
அணங்கு, சிலதியர், புரவலன், காதிசேய், முக
மன், சேவடி, சமழ்மை, படுபனை, ஏற்றுப்பனை,
கடிஞை, மிடுக்கு, அடாவடுப்பினவர், மதுகை,
திருவத்தவர், ஐவாய, மீக்கூற்றம்.

(b) அடியிற் கோடிட்டவைகளுக்குப் பகுபத விலக்க
ணங் கூறுக.

V. பாண்டியநாட்டைப்பற்றி நாலடியாரில் நீங்கள் படி
த்தவரையில் என்ன விசேஷந் தெரியவருகின்
றது?

VI. (a) துன்புற்று வாழ்தலரிது :—இது யாரைப்பற்றிச்
சொல்லியது ?

(b) மழை பெய்யாக்கா லுலகம் பிழைக்கும் வழி
யாது?

(c) கொடுப்பதற்கு யாதும் இல்லாவிடின் என்ன செ
ய்யவேண்டும்? சொற்பமிருந்தா லென்ன
செய்யவேண்டும்? யாதுகாரணம்?

(d) பொலிகடன், ஆண்கடன் :—இப்பெயர்களுக் கரு
த்தமென்ன ?

(e) சீர்கொண்ட சான்றோர் சினம் - இதற்கு அருத்த
மென்ன ? அச்சின மெப்படி முடியும் ?

VII. தெள்ளியவாலின் சிறுபழத்தொருவிதை
தெண்ணீர்க்கயத்துச் சிறுமீன் சினையினும்
நுண்ணிதேயாயினு மண்ணல் யானை
யணிதேர்ப்புரவி யாட்பெரும் படையோடு
மன்னர்க்கிருக்க நிழலாகும்மே.

இதன் கருத்தென்ன ? இதிலுரைத்த வுபமானம் நா
லடியாரில் எதற்குச் சொல்லப்பட்டிருக்கின்றது ?

VIII. அடியில் வரும் பதங்களின் பொருளைக் கதா சந்தர்ப்பத்துடன் கூறுக :—

சலேசுரன், அசுரேந்திரன், பவுலஸ்தியநந்தனன், சிரஞ்சீவி, சமீரணன், அநுக்கிரகம், பாத்திரம், தேசு, பிலவங்கராஜன், அக்கினிசாக்ஷி, இந்திரஜித்து, ராவணஜித்.

IX. உத்தர ராமாயண கதையிலுள் விளங்காநின்ற ராமனுடைய குணாதிசயங்கள் எவை ?

X. அந்நியமனப்படியே அநுசரிருவரும் சந்நிதி சேர்ந்து பிரணமஞ்செய்துநிற்க ஸ்ரீரகுநாயகர் அவர்களை யணைத்து ஆலிங்கனஞ்செய்து நான் பிராமணர்களுக்குச் சொல்லியபடி அவன்மைந்தனை யுயிர்ப்பித்தற்குப் பிரதிக்ஞையை முடித்தேன். இன்னமும் தருமம் வளரும்படி என்னுயிர்போன்ற வுங்களோடு கூட இராசசூயமெனும் யாகத்தைச்செய்ய விரும்புகிறேன். அவ்யாகம் சகல பாபங்களையும் அழிக்கவல்லதும் சகல புண்ணியங்களையுஞ் சாதிக்கவல்லதுமாயிருக்கின்றது. வருணபத மடைந்தவரும் சோமபதமடைந்தவரும் இவ்வேள்வி யியற்றினவனெனக் கேட்டிருக்கிறேன். ஆதலின் இதனைக்குறித்து நீங்கள் ஆலோசித்துச் சொல்லவேண்டும் என்றனர்,

(a) இத்தவசனத்தில் வரும் வடமொழிகளை விலக்கிச் சரியான செந்தமிழ்ச் சொற்களைப் பிரயோகித்து எழுதிக் காட்டுக.

(b) இதில் செய்யும் என்னும் வாய்பாட்டு வினை முற்றுமுய் நிற்கின்றதா எச்சமாய் நிற்கின்றதா ? முற்று வினையை யெடுத்துக்காட்டி இன்னதினை இன்னபாலில் செல்லுகின்றதென்றும் சொல்லுக.

XI. அடியில் வருஞ் செய்யுளை யடிபிரித் தெழுதுக :—

அருந்தவத்தணங்கு மேனி சவரியும்
அடகுமூலம் விருந்தளித்து
அண்ணல்கேட்டி விரிதலை
மதங்கவெற்பில் பொருநனென் சுக்கிரீவன்
அவனெடு நண்புபூண்டு திருந்தலர் செகுத்தி
என்னவுரைத்து நன்முத்தி சேர்ந்தாள்.

THURSDAY, 17TH DECEMBER, 2 TO 5 P M.

TAMIL: TRANSLATION AND COMPOSITION.

I. (*a*) Translate into Tamil—[See Urdu Translation paper, p. cxv].

II. Subject of a short Essay in Tamil—

The effect of the failure of the monsoon.

மழைக்காலத்தில் மழைபெய்யாமற் போவதனால் விளையும் பயன்.

III. Translate into English—

A. (i) அருகுறை குமரர்தம்மை யாய்பிழித் தாமமார் பன்
பருகுவான் போலநோக்கிப் பழமறைக் கிழவ போந்த
திருவினர் யாவரென்னத் தசரதன் சிறுவரீசன்
பொருசிலை மதுகைகாண்பா னிவ்வுழிப் போந்த தென்றான்.

(ii) இமயவிற் குனிசிலெய்தி விழைந்தமை யுணர்ந் தேனென்ன
அமைவருங் கடவுள்வாளி யளித்தனு மரசன் போந்து
கமையுடை வசிட்டன்மெய்யில் விடுத்தவெங் கணைகள்யாவும்

திமிரமேய் கதிரிற்றண்டந் தீயெழ விழுங்கிற் றன்றே.

(iii) கல்லெறிந்தன்ன கயவர்வாயின்னுச்சொல் எல்லாருங்காணப் பொறுத்தாய்ப்பர் - ஒல்லே இடுகீற்றுற்பையவிந்த நாகம்போற்றத்தங் குடிமையாண்வாகிக்கப் பட்டு.

(iv) காதலார்சொல்லுங் கடுஞ்சொலுவந்தாைக்கும் ஏதிலாரின்சொலிற் றீதாமோ - போதெலாம் மாதர்வண்டார்க்கு மலிகடற்றண்சேர்ப்ப ஆவதறிவார்ப் பெறின்.

B. (1) கழுதைப் புண்ணுக்குப் புழுதி மருந்து.

(2) பல்லக்கேற யோகமுண்டு, உன்னியேறச் சீவனில்லே.

(3) வைக்கோற்கூளமும் வேளைக்குதவும்.

(4) ஆர் குத்தியும் அரிசியாளுலே சரி.

(5) ஏழை அழுத கண்ணீர் கூரியவாளை ஒக்கும்.

C. இப்படிக்காரணம் இருந்தபடியால் ஸ்ரீராமபிரானுக்குப் பத்தினிவியோகம் வந்தது. இதைப்பற்றிக் கலங்கலெனச் சுமந்திரர்கூற, இளையவர் சரிதானென்று கலக்கம் நீக்கித், தேரேறிக், கேகினிநதிதீரத்தில் நிசியையொழித்துச், சூரியோதயத்திற் புறப்பட்டு, நடுப்பகலிற் திருவயோத்தி சேர்ந்து, துயரத்தான் முகம் வாடியிருந்த தமையனைக்கண்டு தெண்டனிட்டுக், கலங்கின கண்களோடுங் குழறுகின்ற நாவோடுங், தேவியானைக் காணகத்தில் விட்டுவந்த செய்தியை விண்ணப்பஞ்செய்தார். அதைச் செவியிற் சார்த்திய பெரியபெருமாள் சாலவுந் திருவுள்ளங் கலங்கிநிற்க, இளையபெருமாள், சுவாமீ, முக்காலமும் உலகவியலபும் அறிந்த தேவரீர் இப்படித் துயரக்கடலில் ஆழலாமோ? தேவரீராலேயன்றே உலகமெல்லாஞ் சந்தாபம் நீங்கும்படி இருக்கின்றன? என்றுனாக்கக் கேட்டுத் தக்கங் தேறந்தனர்.

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

TELUGU: TEXT-BOOKS AND GRAMMAR.

I. నాటకలక్షణము లెయ్యెవి? ఆంధ్రమున నాటకములను పేరంబరగు ప్రహ్లాద చరిత్రాదులలోఁ గల దోషము లెవ్వి? అట్టి దోషములులేని ప్రాచీనాంధ్ర నాటక మెద్దేనియునుండిన దానిం బేర్కొనునది.

II. అమితో గ్రుండగు వానిఁజూచి కృతవీర్యామ్నాయజ క్షత్రియా

ధములెల్లన్ హతదృష్టులై కృపణతం దత్పర్వతారణ్యదే
శములంగ్రుమ్మరుచుండిరంధులయి నిశ్శంకంబ్రతిక్రూరక
ర్మములందుద్యతులైనవారికి నధర్మప్రాప్తిగాకుండునే.
లీలఁబుళిందుడొక్కఁడు కళిందసుతోర్మిసరోజినీదళాం
దోళితకోకరేఖఁ దనతోరఁపునల్లని దీర్ఘబాహుపై
హాలహలంబుపోలె విడియత్తెమునం దలయెత్తిచూచుబల్
సాళువమున్వడింజను శశంబుపయిన్విడిచెన్మహోద్ధతిన్
గళగర్తక్రోడ నిర్యత్కహకహనిన దోద్గాఢహానంబుభూ
భృద్బిలముల్ మ్రోయింపగా దంబిని గతినిబొగల్వెంచ
మిన్నెల్లమైగాఁ
జలితాస్యక్రూరదంతక్షతరదవ సనక్షారకీలాలవేల్ల
జ్జ్వలనజ్వాలాభ జిహ్వాంచలుఁడగుచు గదంజాళేముల్-
ద్రిప్పికొంచున్.

(a) అమితోగ్రుండు ఎవఁడు? ఆమ్నాయశబ్దమున కర్థాంత రము దెల్పునది. తత్పర్వతారణ్యమున నెప్పర్వ తారణ్యము?

(b) నిశ్శంకం దీనిన్వినంధిగ వ్రాయునది. మొదటి పద్యమున హతదృష్టులై అంథులై ఆసుచోఁ బునరుక్తి దోషము కలదు లేదని కారణసహితముగఁ దెల్పునది.

(c) రెండవ పద్యమునందలి యలంకారములను లక్షణ సమన్వయము చేయుటయేకాక ఉల్లేఖకు మీ పాఠ పుస్తకములలోనుండి యొక యుదాహరణము నెత్తి వ్రాయునది.

(d) 'తనతోరఁపు నల్లని బాహువు' ఇందు 'ఁపు' 'ని' ఈ వర్ణము లేవ్యాకరణ సూత్రములవలనఁ గలిగినవి? అంత్య 'పు' కార మెట్లు లోపించినది?

(e) సప్తమీవిభక్తి యే యే యర్థకముల వచ్చుచున్నది 'విడియత్తమునన్' ఆసుచో నేయర్థకము? ఆందోళిత మన నర్థాంతరమేమి?

(f) 'కహకహ' ఇట్టిమాటలకుం బేరేమి? 'జిహ్వ' ఇట్లు వకారయుక్తమైన హకారముగల శబ్దములనేనింటి నరసహితముగ వ్రాయునది.

III. (a) తొల్లి దేవేంద్రుండు కొండొకకాలంబ దృశ్యుండయి యుండిన శచీదేవి శోకింప దానికి నుప శ్రుతింజేసి బృహస్పతి దేవేంద్రాగమనంబు సెప్పె.

దేవేంద్రుండేల కొండొకకాలంబ దృశ్యుండయ్యె? ఆతఁ డట్లుండ నతని స్థానమున నెవరుండిరి? ఉపశ్రుతి యననేమి? దేవేంద్ర పునరాగమనం బెట్లయ్యె?

(b) అమృతాపహరణార్థ మరుగు పక్షిస్వామిగతిఁ బుళింద శ్రేణిఁ గమిచి గమిచి.

పక్షిస్వామి అమృతము నేల అపహరించె? అతఁడెచటి పుళిందశ్రేణిని భక్షించె? ఆపుళింద సమూహమున నతని బారిఁబడక తప్పినవారెవరు? వారట్లు తప్పుటకుఁ గతంబేమి?

(c) దయ్యము కార్యనిర్వహణ దత్పరతన్ శృతిసూక్తులొక్కమై నెయ్యెడఁ బల్కునన్న పలుకిచ్చటఁ జూడగ లెస్సయయ్యెగా.

దయ్యము ఏకార్య నిర్వహణమునకై యెవ్వ డెవరితో నే శృతిసూక్తులు పల్కెను? ఈ వాక్య మీ సందర్భములో నెట్లు లెస్సయయ్యెను?

IV. (a) (1) 'పాము కడుముదిసిగామగు'

(2) 'దుర్బలస్య బలంరాజా'

(3) 'గౌతముని గోవ వనుచు'

వీనియర్థముల విశదీకరించి సందర్భములఁ దెల్పుటయే గాక కడపటిదానియందలి కథను వ్రాయునది.

(b) (1) 'గ్రహపంచకంబు రవిఁజేరంబోనిలగ్నము.' గ్రహపంచకమెద్ది?

(2) రోహిణీయుతముగ శశాంకుఁడుండిన దానఁగలుగు ఫలమేమి?

(3) జయలాభసూచక శారీరకనిమిత్తములఁ గొన్నింటిం దెల్పునది.

(c) ఇలనర్ధరాత్రము సంధ్యలు రెండును భూత యక్ష దానవ గంధర్వులు గ్రుమ్మరియెడు ప్రొద్దులు, &c.

(1) ఈ నమ్మక మువలన హిందుపులలోఁ గలిగియుండు కొన్ని వాడుకలఁ దెల్పునది.

(2) హైజెప్పఁబడిన యక్షాను లిట్టివారని నిరూపించు నది.

V. (1) రాపిడి + రాపిడి; చీటిక + చీకటి; దెదరు + దెదరు; తుమురు + తుమురు; బయలు + బయలు చూరలు + చూరలు; వీనిఁ బేర్చి వ్రాయుగది.

(2) నడగొండ, నిట్టలాడనఁ, మూన్నాళ్లు, ఆచ్చోసనికి, చేయుదె.—ఈ రూపములకు నాధారములగు వ్యా కరణసూత్రములనెల్ల వ్రాయవలయు.

(3) చందురుఁడు, చందుఁడు, ఇట్లు రెండు రూపములుండు టకుఁ గారణమేమి? ఇదే కారణమునుబట్టి రెండేసి రూపములుగల మఱి రెండుశబ్దముల వ్రాయునది.

(4) సమానాధి కరణమనఁనేమి? ఉదాహరణ సహితముగఁ దెల్పునది.

ప్రియము దీనికి మహతీవాచక రూపమెట్లు?

(5) తాయెత్తులు ఇందలి యాగాగము లఘువా లేక లఘు వా? మీ అభిప్రాయము సహేతుకముగ నుండవల యును.

(6) విసమానములుగాఁగ వసతోడఁబెన వెట్టినెట్టెంబుగాఁ బ్రేవుఁబొట్టినాఁడు.

ఇందుఁ దత్సమ పదములకు మారు దేశ్య పదములను దేశ్యములకు మారు తత్సమములను ఉంచివ్రాయు నది.

VI. (a) మనుచరిత్రలో ధైర్యమును గురించి చెప్పఁబడియుండు పద్యమును గాని పద్యము తెలియకుండిన దాని తాత్పర్యమును గాని వ్రాయునది.

(b) ———————— । గాక యొరులు ———————— కర్ణుగా
లువఁ బలిమి————————ఁదొండెఁగా————————
శల్యునోర్వఁగలరె ॥

ఇవ్వద్యమున న్విడువంబడియుండు మాటలఁజేర్చి వ్రాయునది.

(c) మీరు చదివినంతలో పోర్షియాయందేమైన దుర్గుణములును పైలకునందేమైన సుగుణములును మీరు కనిపెట్టియుండిన వానిందెల్పి అవి యట్టివయని నిరూపించుట కచ్చటచ్చట వారిప్రసంగముల లోనిమాటల నెత్తివ్రాయునది.

VII (a) ఈ క్రింది పద్యమునకు గణవిభజనముచేసి యతిస్థానములఁ జూపుటయేకాక దాననేదే నొక చరణము ద్విపదగ మార్చునది:—

ఈ విల్లుమోపెట్టి యేనుబాణముల నీయఁత్రమత్స్యంబు
సేసినవాడు

భావజప్రతిముఁ డిబ్బాలకుఁదగిన పతి యిది మునిశక్తిఁ-
బడసినవిద్య

గావునమీరిప్డు గావింపుఁ డియ ఘనతరకార్ముక కౌశలో
న్నతియు

లావునుగలవారలకునవసరము లలితయశంబు కల్యాణం
బువడయ.

(*b*) భోజమిత్ర నృపపూజిత పాదాం।
భోజ భూవినుత పుణ్యవరేణ్యా॥

ఇవి యే వృత్తచరణములు? వీని నేమార్పులుచేసిన నే వృత్తచరణములగును?

VIII. (1) That they'll not show their teeth in way of smile, మానుల నవ్వించుమాటకుగైనదంత.
Though Nestor swear the jest be laughable. మైననవ్వునఁజూఁడనరయకయుండు

(2) (Renowned suitors); and her sunny-locks, (లేఁబంబులెన్నఁగాఁ బెల్చుచుఁబెచ్చు చున్నది)
Hang on her temples like a golden fleece. ముంగురులూహింపనరులు.

(3) Even for that I thank you: మొక్కుదునీవట్లు ముచ్చటించుటకు
Therefore, I pray you, lead me to the caskets. గ్రక్కునఁ నన్నుఁబేటికలఁజూడనిమ్ము.

ఈ భాషాంతరీకరణ గుణాగుణ విమర్శనము చేయునది.

IX. తపతి సంవరణోపాఖ్యానము నద్భలెలుఁగుమాటలలోఁ వ్యాకరణయుక్తముగ వ్రాయునది.

THURSDAY, 17TH DECEMBER, 2 TO 5 P.M.

TELUGU: TRANSLATION AND COMPOSITION.

I. (*a*) Translate into Telugu:—[See Urdu Translation paper, p. CXV].

The question was: Which of the two ought to be preferred: a king who was invincible in war, or a king who, without any ex-

perience in war, could administer civil government with great wisdom, in a time of peace? The majority determined this question in favor of the warrior; for skill to govern in a time of peace, said they, will be of but little use, if the king cannot defend his country in a time of war, since he will himself be divested of his authority, and his people will become slaves to the enemy. Others preferred the pacific prince; because, as he would have more to fear from a war, he would be more careful to avoid it. My sentiments were then asked, and I answered thus:

Although he who can only govern either in peace or in war is but half a king, yet the prince who, by his sagacity, can discover the merit of others, and can defend his country when it is attacked, if not in person, yet by his generals, is, in my opinion, to be preferred before him who knows no art but that of war. A prince whose genius is entirely military, will levy endless wars to extend his dominions, and ruin his people to add a new title to his name.

(b) Render into appropriate Telugu:

(i) Prevention is better than cure.

(ii) Poor as I am, I am too proud to beg.

(iii) He is cut out for that work.

(iv) While Queen Elizabeth merited all the esteem of her people by her real virtues, she also engaged their affections by her pretended ones.

II. Subject of a short essay in Telugu:

The effect of the failure of the monsoon.

వర్షాభావమువలని ఫలము

III. Translate into English:

(i) అని చెప్పినం గరటకుం జెట్టిధీమంతునకే సెక్కొక్క కాలంబునం బ్రమాదంబు వాటిల్లుట స్వాభావికంబు దానికి మగవంబనిలేదు - నీ వింకం జేయందలంచిన కార్యం బేమియునియడిగిన దమనకుం డిట్లనియెం. వినా శోస్మళ కాగ్యంబు మేలుపటుచుటకు భావ్యర్థ సంగ్రహంబున కనర్థ ప్రతీకారంబునకు నర్హంబగు మంత్రంబే శ్రేయంబు - కావున నదియయివుడు కర్తవ్యంబు అందుం బింగళక సంజీవకులకు భేదంబు

పుట్టించు నుపాయంబు పరికించుట ముఖ్యంబు-
దానంజేసి మన కెల్ల యర్థంబులు సిద్ధించు మన
నిప్పుడు పేక్షించినం బిదవం బింగళకుడాయుట
దుష్కరంబు నావిని కరటకుండది యెట్లు సాధ్యం
బగుననినదమనకుండిట్లనియె. ఉపాయంబుచే నేయది
శక్యంబగు నాయది పరాక్రమ శతంబుచేత నయిన
శక్యంబు గాదు కాకంబొక్కఁడు పాయంబుచేఁ
దనకు విరోధియగు సరీసృపంబును దోరించె నక్కథ
వక్కాణించెద నాకర్ణింపుము.

(2) రెండుగంపలపొల్లులో రెండుమంచి
గింజలొకచోనడంగిన క్రియదలిర్ప,
నితనియుక్తిప్రపంచమం దెనయనటులు
సరసవాక్యంబులనుకోనఁ జాలునట్టి
పదములుండును వెదకిన ఫలములేదు.

(3) బాల్యంబునందునే బాణమొక్కటియేసి
కన్పడకున్నన క్కాండమునకు
సరిదానిఁగొనివింట సంధించిసమమగు
బలముతోదానివెం బడినివదలి
జాగరూకతదృష్టి సారింపదానిచే
నిరుముల్కులనుగందు నేదియేని
కారణంబునఁదొంటి కాండంబుఁగానక
యున్నరెండవదాని నొందుదెపుడు.
ఇట్టిచిన్ననాటి యెఱుకనుబరికించి
బాధకంబులేక వఱలుకతన
నీకుఁదెల్పిదాని నేర్పునుజూపించి
విశదపఱతునొక్క విన్నపంబు.

(4) దయ్యముకార్యనిర్వహణతత్పరతన్ శ్రుతిసూక్తులొక్కమై
సెయ్యడఁ బల్కు నన్నపలు కిచ్చటఁజూడఁగ లెస్సయ
య్యెఁగా
యొయ్యన నిద్ధురాత్మకుఁడు యోగ్యులవృత్తములిట్లు తె
ల్పుటల్
తియ్యనిపండు మాఁగుక్రియ తీవ్రునిశాంతపు మోముఁబో
లెడిన్.

(5) అనఘచరితుఁడు మాయన్న వనములోన।
జనుచునొక్కనాఁడొక్క వండొనరఁగాంచి।
కొనియె శుచియిది యౌనుగాఁదనియెఱుంగఁ।
బడని భూమితలంబుపైఁ బడినదాని॥

(6) ఆంబుజ మిత్రుఁడంబు దచయాంతరితుండగు చుందదీ
యతే।
జంబుజగజ్జనంబులకు శక్యమెకప్పఁగమీకుగూఢభా।
వంబుననున్నమీదగున వారితతేజము భూజనప్రసి।
ద్ధంబగుఁగాకదానిఁ బిహితంబుగనెవ్వరు సేయసేర్తురే॥

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

KAṆARESE: TEXT-BOOKS AND GRAMMAR

I (a) ఔక్తుఔక్తిగి మక్తిమక్తి బల్వక్తరదొ
ళొక్తిడిసుక్త లిక్తిక్తలుం కిక్తఖోఁ
ల్మక్తిముసుకిక్తు కగ్గక్తలి ధరిక్రియం ముళ్ళ మొసి
కొళ్ళదంకి.

(b) బిరుగాళిబిఁసిదరే నొరజేవిండద కాంతు
మురియదిడుచేఁ నిమిషమాత్రదొళు సురసేఁనే
కురికుంబువట్టు తాయ్గం మక్కళాగదొంచేఁ బారి
బేన్నిత్తుదు.

(c) భూసురోత్తమ నినగేతాంకొడువ చేఁకాధన
మీసుదానదొళధిక యజ్ఞనాయకనాద
వాసుచేఁవం ప్రీతనాగలస్మక్కుతోఁద్భవ రాద
జీవిగళొళు
లేఁసిందపావన్గేఁకను ధనవనీఁవేడేయొ
శోఁసరిసదిగలి బుద్ధిగళేందునృపకిక
ట్టానురదకొయ్గారరం కరేసికేగసిదం మసదకృ
గత్తిగళను.

(d) ఎడబలదమండలద బేఁధదింబేఁదదిం
దడిగడిగేసేవ పరాక్రమదించే క్రమదించే
కొడువ బిడువంబినకరంగదిం రంగదింకొలగ దగ్గ
ళికేయించే
దృఢబాపఘోఁషభీఁ కరదించే కరదించే
జడకేపొద్దద సాకుసత్వదిం సత్వదిం
కడగితామ్రధ్వజ విజయరాగ జయరాగ రేణ్ణాడి
దర్ధురదొళు.

మేఁలిన పద్యగళ అర్థవన్ను బరియువదు.

1. (a) పద్యదల్లిరువ ప్రాసద హిసరేఁను?
2. (b) పద్యదల్లిరువ అర్థాలంకారవ్యావదు?
3. (d) పద్యదల్లిరువ శబ్దాలంకారవ్యావదు?

II. (a) దమనకను పింగళకనిగే సంజీవకనమేలే బాడి
ఓళిదాగ, పింగళకను మొదలు 'కన్నస్నేఁ
ఒకనొందువేళి అపకారవన్ను మాడి దా
గ్యూ అవనన్ను బిట్టుబిడువదు ఒళ్ళిదల్ల ఎందు
ఓళి కరువాయ 'అవనన్ను నిరాకరిసి ఓర
డిసిబిడ్యోణవే' ఎందు కేళుత్తానే.

ఈ మద్యదల్లి ఆవరిబ్బరిగూ నడద సంభాషణేయ తాత్పర్య
వన్ను మూరునాక్యగళల్లి బరియువదు.

సంజీవకనన్ను ఓరడిసిబిడువదక్కే దమనకన ఆక్షేపణే
యేను ?

కరువాయ దమనకను కూరికిగణేగళ కథేయన్ను యావ
మాకిగే దృష్టాంతవాగి ఓళుత్తానే ?

(b) జలంధరనిగే ఇంద్ర, విష్ణు, ఈశ్వరరొడనే
కాళగదొరేయువదక్కే నేవగళ్యావవు?

III. (a) యోగపదగళిగూ యోగరూఢపదగళిగూ వ్యత్యా
సవేను ?

కేళగిన పదగళల్లి ప్రకిపొందక్కూ అర్థవన్ను ఓళి
ఆ అర్థక్యాగేబంకొ బరియువదు.—

బగ్గదేవలుడియ — ఆకపత్ర — కర్ణపత్ర — గ్రోత్రా
రిపుత్ర — పంజానన — అవనిజా పరగ్రహ
కలాదర — జలందర — పక్కరేక్కే —
మారారి — మృగకృష్ణ.

(b) కేళగే బరేదిరువవుగళ అర్థవన్ను బరియబేకు:—

బేళువేయబూది — ఆక్కర్ — కొండేయ — ఓరేయ
సూడిదమ్మే -- కురుగల్ — ఆకేవాళరు—
వాసిప్పిసరవాయ్తు — ఇట్టణిను.

(c) కేళగే ఈలిరువ పదార్థగళిగే అంకితనామ గళ్యావవు ?

అర్జుననధనుస్సు — అర్జుననశంఖ

కృష్ణనధనుస్సు — కృష్ణనశంఖ

కురనధనుస్సు— ఇంద్రనసఖి

IV. (a) 1. .....సుకవీంద్రనంకి సం

ఘటక జాతుర్య పదరజనెయిం వివిధవిష
యంగళొళ్ కాణిసిదుదు

భటనంకి సమ్యగ్విరాజ కదభూమిభృ

క్కటకంగళలిసంజరిసిదుదు పాండవన

పటుకరమహాధ్వర కురంగమం

2. నుకపుండరీక విలసికమాగికొళనల్ల

వతుళపక్రవిరాజమాగి మరనల్లవి

శృతసోమ మంగళ బుధాన్వితంకానాగియా
కాశవలయమల్ల

ధృతఖడ్గ సంతానమాగియుం నాడిప

ర్వతమల్ల కీకురంజితముంగ్రహాంత్యమ

ల్లకిఘనస్యందనాన్వితమాగి వనమల్ల మేనిసి
పడి నడదుదు.

ఇవుగళల్లి శ్లేషార్థవుళ్ళ పదగళిగే మాత్ర సందర్భాను సారవాద ఎరడిరడర్థగళన్ను బరియబేకు.

ఈ శ్లోకగళల్లిరువ అలంకారగళ కిసరేను.

(b) 1. కురణదాసేయనుళిదు కురిదోడువఱికమోకురదొళగే బేకుబేకురద్వీదిసేణసిసం ।

కురణకాలదకాలకురనకోఁప
దోళిరివ కురకునేఁం బణ్ణిసువేను.

2. ..... తాకనముణక్రియకేకురివకుదు రాఘ
ఖీష్మరంకేకీర్తి
స్థిరవకుదు పికనభాషిగేనిలల్ జనకనవ
కరిపనాక్మజనాగి కంటేమక్కళోళగేరవిల్ల

ఇవుగళల్లి గుర్తుమాడిరువవుగళన్ను కిళదు కోళ్ళువదక్కే
బేకాద వ్యాఖ్యానవన్ను బరియువదు.

V. (a) విభక్తిప్రక్రియగళల్లి కుళిగన్నడక్కు కొసకన్న
డక్కు ఇరువ వ్యత్యాసగళన్ను కిళిసబేకు.

కుళిగన్నడద బకువజనప్రక్రియగళ్యావవు? ఆవుగళల్లి యావ
యావదు యావయావ రూపకోదదింద కొస
కన్నడదల్లి వాడికేయాగిదే? ఒందొందు దాకు
రణేయన్ను కొడువదు.

(b) కేళ్గినవుగళిగే వ్యాకరణసంబంధవాద టిప్పణిగ
ళన్ను సంక్షేపవాగి బరియబేకు:—

1. నభకేవిజయన రథవనీడాడి బళికదం
రభసదిందిళే గప్పళిసువినం &c.

2. ఎందుపరియంకం ద్విజర్గవజ్ఞియనేసగ
దందుపరియకం &c.

3. విష్ణునిజలోకదోళు సుఖమిర్దను

4. కేలకాలదింమెలే.

VI. (a) రథమొందిగాలియదుసా
రధియప్పొడే పిళవన సమమశ్వమవేంకుం

ప్రధికప్రకాపదిందం
మధికప్రకిపక్షనుదయియాదందినపం.

జ్యేమిని భారతదల్లి ఇదరహాగిరువ శ్లోకవన్ను బరియబేకు.

(b) ఈవాయు వీజంద్ర నీపుష్పబాణ నీ
మావరుం విరహిగళకొలేగుళిదరకటా.

ఈపద్యద పూర్వార్ధదల్లి వాయుజంద్ర పుష్పబాణరిగే ఓళిరతక్క విశేషణగళన్ను బరేదు ఆవు ప్రకృతోజీతవేంబువదన్ను తోరిసువదు.

(c) శరక్కాలదమేఘగళు బిళుపాదద్దక్కే జ్యేమిని శారతదల్లి ఊహితకారణ యావదు ఓళల్పట్టిదే?

(d) జ్యేమినిభారతదల్లి సూర్యాస్తమయక్కే ఓళిరువ ఉత్ప్రేక్షేయావదు?

(e) శివభక్తరేబలుకులా, ఇదన్ను యారు యావసందర్భదల్లి ఓళిద్దు?

(f) ధనదాశేయిం ధర్మమంమాణ్డనంతాదే, యారు? ఛ్యాగే?

(g) ఓందేప్రార్థంగే నిన్నపుణ్యవనిక్తేలా, ఓందినసందర్భవన్ను సూచిసువదు.

VII. (a) కృదంత - తద్ధితాంత - ఇవుగళ అర్థవేను?

(b) ఉద్యోగ - యమ - తాత - ఇవుగళ తద్భవగళన్ను బరేదు ఆ తద్భవగళల్లి సంభవిసువ అక్షరవ్యత్యాసగళల్లి ప్రకిసొంద ఒందొందు ఇతర ఉదాకురణేయన్ను కొడబేకు.

VIII. (a) మయారధ్వజను తన్న శరీరార్ధవన్ను కొడువదక్కే, ఒప్పికొండాగ కపటద్విజనింథాత

నేందు తిళదిద్దనే? హాగిల్లదిద్దరే అవను ఒప్పి
కొండద్దరల్లేనాదరూ అసమంజసవాగి తోరు
త్తదేయో? సకారణవాగి జర్జిసువదు.

(b) కరటకదమనకర గుణనడతే ముంకౌదంశగళల్లిర
తక్క పరస్పర కౌరతమ్యగళన్ను కోరిస
బేకు.

THURSDAY, 17TH DECEMBER, 2 TO 5 P.M.

KANARESE: TRANSLATION AND COMPOSITION.

I. (a) Translate into Kanarese :—[See Urdu Translation paper, p. cxv.]

II. Subject of a short essay in Kanarese :—

The effect of the failure of the monsoon.

మళి ఇల్ల దిద్దరే ఉంటాగువ నష్టకష్టగళు.

III. Translate into idiomatic English :

1. బట్టి విడిదవ రిర్వరుం మయారధ్వజన
పట్టణకే నడేతందరన్నెగం చేసేచేసేయో
ళిట్టణిసి లోకమం కంగెడిసు వంధకారంగళ
నిలలీయదే।
అట్టి కురికురిదు బళల్దుకాకురది కం
గెట్టుకళిగుంది మెల్లనేనభోమార్గమం
బిట్టుపశ్చిమగిరియ తప్పలంసార్దనేనే రవిపడుగడ
లోళిసేదను॥

2. గాలియొంచేరథకే బోడాగిపోడువరే
సాలచేళేకుయం నడసువరే సారథిగే
కాలిల్ల లోకయాత్రియ నొల్లేనేందో డాగచే
తనగే తిరుగలేకే।.

కాలగకియం మీరబారదింకేంబుదం
మూలోక కేజ్జరిసువంకే పూర్వాజ్జలద
మేలేమూడిదనేందిన పోలబ్జబాంధవం నయనాంధ
మందడగలు।

3. అకివృద్ధ నల్పదినమిర్పవం పుత్రవ
ర్జితనిన్ను తానిర్దు మాళ్వుచేసేన్ననా
కుకిగోండు తనగే గకియంకోడువ సుతనం
బిడువుదేందు నాబేడికోళలు।
మృకియబయసువ దఃఖగావకంజకమిల్ల
కుతవకుదు సుఖదింద బాళ్వంగే కాలక
ల్పితదింద దోరకేదనివం నిన్నసోల్లే నాంపోగేందు కురినుడిదుదు॥

4. ఆ నుడిగేనడుగి తనయనమీలగాశేయిం
దానంచే నాసింకుకేలే మృగాధిప తన్న
సూనువం కావరిల్లవే ధరేయోళుగ్రతప దాన
ధర్మంగళింద।
ఏనుపాయం గేయ్వేనేందు మరుగల్కేపం
జానసంబళిక తనగోందాశేయం కోట్టు
భూనాథనిన్నేడిగే కళుకిదోడే బంచేసేనలవ
నీశనింకేందను.

5. ఆరుబేట్టవసోబ్బ హారబకుచేందరేః,
హారబకుచేందు ఎనబేకు; మూర్ఖనా
కోర్యాటసల్ల; సర్వజ్ఞ.

6. ఇళేయోళేణ యిల్ల చేష్టేశ్వర్య సుఖకోగ
గళను కేలకాలవనుభవిసి విధియింద,

నేళను దేశత్యాగవాగి సరిసుతసహితర ?
• కళకొండు తోళలిశ్రమ పడలిల్లవేను ?

7. ఎల్పేకుజ్జనేా, దారిలి హోగువ వ్యాజ్యవకొండు కొండ హాగే నమగే ఇంథ కేలస వ్యాకే? దేవరు కొట్టష్టులూటమాడి సుఖవాగిరోణ ఇంథ కేలసగళిగే హోదరే నమగేను బందిరోతిళియదు.

8. అదన్ను కేళి హిరణ్యకను బకుబేగ బోక్కయింద హొరగే బందు అల్లి ఆపన్నవాగి ఇద్ద స్నేహితనన్ను బకుళ ఆ దరదింద తబ్బికొండు దుఃఖితనాగి, ఎల్పే స్నేహితనేా ఒళ్ళే వివేకియాదనినగే ఇంథ దురవస్థే బంతేఎంత హేళిదను. అదక్కే జీత్రగ్రీవను ముగుళునగే నగుత్తా హిరణ్యకనన్ను నోడి ఇంతేందను నీను సమస్తవూ తిళిదననాగిద్దు ఈ ప్రకారనన్నకేళబేకాద్దేను? అరికిద్దాగ్యూ నీను కేళిది అద్దరింద హేళుత్తేనే యావనింద యావాగ యావస్థళదల్లి యావశుభకర్మ వాగలి అశుభకర్మవాగలి ఆగబేకాగిరుత్తదోా అవనింద ఆగ అస్థళదల్లి అదుద్దేవ వశదింద మనుష్యరిగే ఆగుత్తిరువదు. దేవకృతవాద్దక్కే నావేనుమాడ బల్లేవు? ఎంత హేళలాగి; హిరణ్యకను నాను విజారిసదే డిదేను, నీను హేళిద ప్రకార ఆగదే తప్పదు; పక్షిగళు మరు దోజన ఎత్తరదింద భూమియ మేలే ఇరువమాంసవన్ను కండుకొళ్ళువవు, కాలస

ಮೀಪಿಸಿದರೆ ಹುಕ್ಕರದಲಿದ್ದರೂ ಬಲೆಯಹಗ್ಗಗಳನ್ನು ಕುಡುಹಿಡಿಯಲಾರರು. ಆನೆಗಳಿಗೂ, ಪಕ್ಷಿಗಳಿಗೂ, ಸರ್ಪಗಳಿಗೂ ಬಂಧನವನ್ನೂ ಬುದ್ಧಿವಂತರಿಗೆ ಬಡತನವನ್ನೂ ಉಂಟುಮಾಡಿದ ವಿಧಿಯನ್ನು ಏನು ಹೇಳಬೇಕು?

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

MALAYALAM: TEXT-BOOKS AND GRAMMAR.

I. (*a*) തതഃപ്രഭാതെതപനെപ്രഭാതെ
തയാസമംതദപിനെപ്രയാതം
പരാശരാന്ത്യാത്മപരാശരാത്മജ
കൃതപ്രണാമാംക്രിതിനംബഭാഷിരെ.

(*b*) വിസൃഷ്ടാതമ്പംഗീവിപിനഭ വിഷ്ടൊരെ
പിവിജനെ
വിലാപംവന്യാനാംവിവിധ തരമാകണ്യെഭ
യദം
വിധിംസാനിന്ദന്തീവിവശകരുണാ വിശ്ര
തഹ്രണാ
വിലാപംപ്രാരേഭെവിമലചരിതാവീരദയി
താ.

(1) ംരം ശ്ലോകങ്ങളെ അനുയിച്ച അർത്ഥംപ
റക.

(2) *b* ശ്ലോകത്തിന്റെ വൃത്തം എന്ത.

(3) മേൽ ശ്ലോകങ്ങളിൽ കീഴ്പ്പുരയിട്ടിരിക്കുന്ന പദങ്ങളുടെ വിഭക്തി എന്ത.

II. താഴെ എഴുതിയതുകളുടെ അർത്ഥം വ്യക്തമായ പറക.

(1) രണ്ടുപ്രകാരം നിരൂപിച്ചാലും തണ്ടോമിഴിയെ നമുക്കിഹവേണ്ട.

(2) തന്നെത്താനറിയുന്നതിനെക്കാൾ പിന്നെ വിശേഷിച്ചൊരു ഗുണമില്ലാ.

(3) സദാചാരബോധത്തിന്റെ മനോനിയമനത്തിന്നായി ഒരുവന്റെ സ്വന്ത വ്യാപ്രത്തികളെമാത്രം ഏല്പിക്കുകയും തന്മൂലം സ്വാസ്വീകാരമെന്നോ സ്വാസ്വീകാരമെന്നോ ഉള്ള ഒരു മനോവികാരം ഉല്പന്നമാകയും ചെയ്യും. വിഷയത്തുംകൽക്കി പൂർണ്ണതകളായി ഭവിക്കുന്ന പ്രവൃത്തികളോടുകൂടിയ സദാചാരബോധത്തിനെ സാധാരണ ഭാഷയിൽ മനൊസാക്ഷിയെന്ന പറയുന്നു.

(4) ആഗമാന്ത വേദിയായ യോഗിനാഥദശ്നെന.

ഭാഗധേയമാഗതംമെ വാഗധീശതുല്യധീമൻ.

III. (a) സീതാ - മാടമ്പി - കുറി - ചെപ്പ - കമലം - കടകം - ഇവകളുടെ നാനാർത്ഥങ്ങൾ പറക.

(*b*) ഷഡിന്ദ്രിയങ്ങൾ ഏവ.

(*c*) ലവണാസുരൻ ആര.

(*d*) വാരണാവതം എവിടെ.

(*e*) "ദെവകളെതിരില്ലവനരണത്തിൽ" എന്തുകൊണ്ട.

IV. (*a*) അറം - പറം - ദൌഹൃദം - മഹിള - ഇവകളുടെ അർത്ഥം പറക.

(*b*) ഭീമസേനൻ-കുന്തീ.ശ്രീരാമൻ-ഹിഡുംബി-ഇവരുടെ സ്വഭാവ ഗുണദോഷങ്ങളെ കുറിച്ച പഠിച്ച കവിതകളിൽനിന്നഎന്ത അറിയാം.

(*c*) ബകവധം കവിത ഏത പുരാണത്തിന്റെ ഏതഭാഗത്തിൽനിന്ന എടുത്തത ആ മാതൃഗ്രന്ഥത്തിൽ പറഞ്ഞിരിക്കുന്നതുംകോട്ടയത്ത തമ്പുരാന്റെ കവിതയിൽ പറഞ്ഞിരിക്കുന്നതും തമ്മിൽ ഏതെങ്കിലും വ്യത്യാസങ്ങൾ ഉണ്ടൊ.

V. (*a*) (1) "ദാരസംഗ്രഹമിന്ന ഞാൻ താതനിയോഗംകൂടാതെ നാരിമണെ ചെയ്കയില്ല നാകനിതംബിനീ.

(2) ശരണാഗതജനപാലനധർമ്മം
കരുണാസാഗരതവകുലധർമ്മം.

ഇതുകൾക്ക സദൃശങ്ങളായ വൃത്തങ്ങൾ പഠിച്ച പുസ്തകങ്ങളിൽ നിന്ന എഴുതുക.

(b) സാഹസം-പുരുഷയത്നം-അപവാദം-പാപം-ഇവയെക്കുറിച്ചു കവികൾ എന്തുപറയുന്നു.

(c) താഴെ എഴുതിയിരിക്കുന്ന പദങ്ങൾക്കു കവികൾ ഉപയോഗിച്ചിരിക്കുന്ന വിശേഷണ പദങ്ങളെ എഴുതുക.

കുചയുഗളം, കണ്ഡങ്ങൾ. } ബകവധം.

(d) നളചരിതം തുള്ളലിൽ സാധാരണയായിരണ്ടാമത്തെ അക്ഷരം കൊണ്ടാകുന്ന പ്രാസം. ആദ്യക്ഷരപ്രാസം ഒരു ദിക്കിൽമാത്രം ഉണ്ട. അത എഴുതുക.

VI. താഴെ പറഞ്ഞിരിക്കുന്നവകൾക്കു ഉപമകളെയും ദൃഷ്ടാന്തങ്ങളെയും കവികൾ പ്രയോഗിച്ചിരിക്കുന്നു. അതിനെ എഴുതുക.

(1) സുരവധുമാരുടെനടുവിലിദാനിം നരവധുചെരുകയില്ലാ.

(2) ദമയന്തിയുഗളംചെയ്വാൻ ശ്രമമില്ലെതുമിനിക്കവിശേഷാൽ.

(3) ഫലമില്ലാതൊരുകായ്യ്വും ബലവാനും ചെയ്കയില്ലാ.

(4) ലക്ഷണയുതമാം ദമയന്തീമുഖമക്ഷിതിപാലനുകാണായ്വന്നു.

(5) നിന്റെ ഭാഗ്യയായതിനാൽ പാരിലുള്ള സു
ഖമെല്ലാമെ ചേർന്നമെ.

(6) കുടിലന്മാരോടു വ്യാജംകൂടാതെ കണ്ടതന്നെ
കേടറസത്യംകൊണ്ടു കൂടുമൊ കരുവീര.

VII. (a) "കാടേശതിനമുക്ക" എന്ന ബകവധത്തി
ലുള്ള പ്രയോഗത്തിന ചിലർ ദോഷം പ
റയുന്നു. അത എന്ത.
ംരം ദോഷം നേരായിട്ടുള്ളതൊ. കാര
ണസഹിതം ഉത്തരം പറക.

(b) ലവണാസുരവധം എന്ന നാമധേയം ആ
ക വിതക്ക ശരിയൊ. ംരം കഥയെവേ
റെപ്രകാരേണ ആരങ്കിലും എഴുതിയിട്ട
ണ്ടൊ.

VIII. നളചരിതം തുള്ളലിൽനിന്ന കവിയെകുറിച്ചും
കവിയുടെകാലത്തുള്ള ജനങ്ങളുടെ അവ
സ്ഥയെകുറിച്ചും അറിയുന്നതിനെചുരു
ക്കത്തിൽ പറക.

IX. (a) സദാചാരനിദാന ഗ്രന്ഥകർത്താവിന്റെ
അഭിപ്രായപ്രകാരം മനുഷ്യന്റെ കർത്ത
വ്യ കർമ്മങ്ങളെ മൂന്നുബ്രഹദ്ഭാഗങ്ങളായി
വേർതിരിക്കാം. ംരം ഭാഗങ്ങളും എന്ത.
ംരം വേർതിരിക്കൽ ശരിയൊ. കാരണ
സഹിതം എഴുതുക.

(b) വിനയം എന്നാൽ എന്ത.

(c) വസൂവിന ചെയ്യുന്ന ഉപദ്രവങ്ങളും ഏതെല്ലാം.

(d) പ്രതികാരം ചെയ്യാതിരുപ്പാൻ ഗ്രന്ഥകർത്താവ പറഞ്ഞ സമാധാനം തൃപ്തികരമൊ.

X. "തുള്ളൽ പലതരത്തിൽ ഉണ്ടെങ്കിലും മൂന്നതരം തന്നെ പ്രധാനമായി പറയുന്നു." അവകളും ഏത.

(a) താഴെ എഴുതിയിരിക്കുന്ന വൃത്തങ്ങളും ഓരൊരൊ തുള്ളലുകളിൽനിന്ന എടുത്തതാ അവയെ തരംതിരിച്ച ലക്ഷണൊസഹിതം പറക.

(1) മനതാരിൽ പലവിദ്യാപഠിപ്പാനുള്ളൊരുമോഹം
ജനിക്കയാൽവിടകൊണ്ടെ നടിയൻനിൻത.
രുമുമ്പിൽ.

(2) പഞ്ചതാരപൊടിയേററം ചിലത്തിയാൽ
.നെഞ്ചകത്തിന്നരുചിയും കറഞ്ഞുപോം.

(3) അക്കാലത്തദ്വാരകതന്നിൽ
ചക്രായുധനാമരവിന്ദാക്ഷൻ

(4) കൊള്ളിവാക്കുക ളിങ്ങിനെ മുനിചൊന്നത
യെ്വടുകേട്ടടൻ

ഉള്ളിലാധിമുഴുത്തുടൻചെവിപൊത്തി നിന്നി
തുസുന്ദരീ.

(5) കരുണാവാരിധെനിന്റെചരണരെണുകൊ
ണ്ടെന്റെ
ശരണംനിർമ്മലമായി വരണമെന്നിനിക്കുള്ളി
ൽ.

(6) വല്ലാത്തവരണുറച്ചുതമ്മിൽതല്ലിക്കാൻ മൊ
ഹമുദിച്ചുഇനിതെല്ലുമെ
താമസംകൂടാതെചെന്നതു ചെയ്യെണമെന്നു
നിനച്ചു.

THURSDAY, 17TH DECEMBER, 2 TO 5 P.M.

MALAYALAM: TRANSLATION AND COMPOSITION.

I. (*a*) Translate into Malayalam—[See Urdu Translation paper, p. cxv.]

II. Subject of a short Essay in Malayalam:
The effect of the failure of the monsoon.

(കാലവർഷം ഇല്ലാഞ്ഞാലുള്ള ഫലങ്ങൾ.)

III. Translate into English:

ആജ്ഞാമാലംബ്യമാതുർവ്വനഭുവിചജവാത്സഞ്ചര
ന്തൌകുമരൌ
സാകംസംപ്രെക്ഷണീയൌസകലഗുണഗണെ
ശ്ചന്ദ്രബിംബൊപമാസ്യൌ
ഉൽപ്രേക്ഷ്യാൽപ്രെക്ഷ്യവൃക്ഷാൻഫലഭരനമിതാ
നത്ഭുതാൻപക്ഷിസംഘാൻ
ദൃഷ്ട്വതുംഗംതുരംഗംസകുതുകമനുജസൂത്ര പൂർവ്വം
ജഗാദ.

IV. ഈ കർത്തവ്യ കർമ്മാനുഷ്ഠാനത്തിനു പ്രാപ്തമായി കുറഞ്ഞ മുമ്പത്തപ്പെട്ട ഒരുവനെ സംബന്ധിച്ചു അവന്റെ നിരപരാധത്വത്തെക്കുറിച്ചു നമുക്കു വിശ്വാസമുണ്ടെങ്കിൽ നമ്മാൽ കഴിയുന്നേടത്തോളം അവനെ അതിൽനിന്നും മൊചിപ്പിക്കുന്നതിനു ശ്രമിക്കുന്നതിനും മറ്റു സംഗതികളെ സംബന്ധിച്ചു നമ്മുടെ സമസൃഷ്ടിമാരുടെ കുറവുകളെ നാം ഒഴിക്കയൊ അല്ലെങ്കിൽ അതു അസാദ്ധ്യവും അയുക്തവും ആയിരിക്കുന്നേടത്തു അവയെ ക്ലേശമാകുന്ന സംഗതികൾക്കു പൂർണ്ണമായി ഇടം അനുവദിക്കുകയൊ ചെയ്യുന്നതിനും നാം അപേക്ഷിതന്മാരായിരിക്കുന്നു.

V. അങ്ങിനെ ഇരിക്കുമ്പോൾ അവൻ വീട്ടിൽചെന്നു ഭാര്യ്യാ പുത്രന്മാർ ഈ കാര്യ്യം ഒന്നും അറിയരുതു എന്നു വിചാരിച്ചു കഴിയുന്നേടത്തോളം അടങ്ങിപാർത്തു എങ്കിലും മനഃക്ലേശം സഹിയാത്തവണ്ണം വർദ്ധിച്ചാറെ മന്ദതവിട്ടു അവിരെ വിളിച്ചു അല്ലയൊ പ്രിയന്മാരെ എന്മെൽ ഇരിക്കുന്ന ഭാരംനിമിത്തം ഞാൻ ബഹു ദുഃഖിതനായിതീർന്നു നമ്മുടെ പട്ടണം ഒരഗ്നിവഷ്ടത്താൽ പെറ്റുപോകും, എന്നു കെട്ടു ഇവിടെനിന്നു ഓടിപോവാൻ വഴിയെ അന്വേഷിക്കുണം അല്ലെങ്കിൽ നാമും ആപ്രളയത്തിൽ ദയങ്കരമായി നശിച്ചുപോകും. എന്നു പറഞ്ഞാറെ അവർ വിശ്വസിച്ചില്ലെങ്കിലും വളരെ പേടിച്ചുവല്ല ഭ്രാന്തൊ എന്തൊ പിടിച്ചിട്ടുണ്ടൊയിരിക്കും, എന്നു വിചാരിച്ചു വൈകുന്നേരമാകകൊണ്ടു ബുദ്ധിഭ്രമം തീർപ്പാനായി അവനെ വേഗത്തിൽ കട്ടിലി

ന്മേൽ കിടത്തിതടവി കാലുംഞെക്കി എങ്കിലും സൌഖ്യംവരാതെ പുലരുവോളം ദുഃഖിച്ചു കർഞ്ഞു പാർക്കുന്നതിനാൽ രാവിലെ സൌഖ്യമുണ്ടൊ എന്നു അവർ ചോദിച്ചപ്പോൾ സൌഖ്യം വന്നില്ല സങ്കടം നാന്മടങ്ങു വർദ്ധിച്ചിരിക്കുന്നു. നിങ്ങളും ഈ നാശപുരം വിട്ടോടിപ്പോകെണം. എന്നു പറഞ്ഞതുകേട്ടു അവർ കോപിച്ചും ചിരിച്ചും നിന്ദിച്ചുംകൊണ്ട അവന്നു സുബോധം വരുത്തുവാൻ നോക്കി.

VI. (1) കുതിരകണ്ടിയും മതിലും ഓടിപാഞ്ഞു.

(2) കീരിയും മൂർഖനുംപോലെ സ്നേഹം.

(3) ഹിതാഹിതങ്ങളെ വിചാരിക്ക പ്രിയാപ്രിയങ്ങളെയല്ല.

(4) അകൌശലലക്ഷണം സാധനദൂഷ്യം.

(5) ഈററി ഇറുമ്പിമുതൽ ഉണ്ടാക്കുക.

(6) അവൻ കളവും കയ്യുമായി അകപ്പെട്ടു.

(7) കുരക്കുമ്പട്ടി കടിക്കില്ലാ.

(8) നരിനരെച്ചാലും കടിക്കും.

THURSDAY, 17TH DECEMBER, 10 A.M. TO 1 P.M.

URIYA TEXT-BOOKS AND GRAMMAR.

I (ക) ନିମ୍ନଲିଖିତ ବାକ୍ୟମାନଙ୍କୁ ବ୍ୟାଖ୍ୟା କର ।

1. ଆଶାପଛ ଶୋଷିବ ତା ନେସିମାର ।

2. ଫଳବତୀ ପ୍ରାର୍ଥନା ଅଧମଠାରେ,
ନିନ୍ଦମାୟ ଅଟଇ ମୋହ ବିଚାରେ ।

3. ଧବଳ ଘୁଣ୍ଡୁଚାକମାଳ ପଗ୍ଭଯ୍ଯେ
ବଶିବେ ଅଭ୍ଗ୍ମ ଡୋ। ଶ୍ୟାମକାଯ୍ଯେ ।

4. ଗିର୍ ଡୋ। ସଙ୍ଗ ପାଇ୍ ଗ୍ଜବ ଭ୍ଲେ,
ଗ୍ଲେମାଞ୍ଜ ପ୍ରକ୍ଟିବ କବମ୍ଭ୍ଲେ ।

5. ଏଣୁ ନଲିମା-ପବ୍ବ-ନଯ୍ନ ମାର
ପୋଟ୍ଟିବେ ନଜକରେ ବାନ୍ଧ ମିହର ।

6. ମହୁତ ଜନର ଏଗ୍ଭ ଅଟଳ,
ଅଭୀଷ୍ଟବାନ ପ୍ରଭବାଣୀ କେବଳ ।

7. ବାର୍ ବୁବଙ୍କର ସମ୍ଭ୍ଲଙ୍କର ଅଟ; ଡେଣୁ ଯାଚନ ।
ହେ ।

8. ଵରୁଣାମଯୂ ଜଗବୀଶ୍ୱର ମନୁଷ୍ୟମନରେ ବଲବତ୍ତା
ଆସଙ୍ଗଲିପ୍ସା ପ୍ରେପଣ କଣଅନ୍ତୁ ।

9. କାଲକିମେ ପ୍ରଜାମାନେ ବୁବ୍ଦିମତ ଇଚ୍ଛ୍ୟପଣଉନ୍ତୁ
ଉତ୍ପୀଡ଼କ ପ୍ରଜାମାନଙ୍କର ଲୋକବଗର୍ହିତ କାର୍ଯ୍ୟ
ସବୁବୁଝି ପାଣନ୍ତୁ ।

10. ମନୁଷ୍ୟ ଈଶ୍ୱରପ୍ରଦତ୍ତ ଶକ୍ତି କଚଯ୍ଯର ପ୍ରଯୋଗ ଦ୍ୱାର୍
ଏହ ପୃଥ୍ୱୀକୁ ଯେଉଁ ପଣବର୍ତ୍ତିତ କଣଅଛି,
ବର୍ତ୍ତମାନ ତାହା ଆମ୍ଭମାନଙ୍କର ଆଲୋଚ୍ୟ ।

11. ନବୀନଅଧ୍ୟୟ ତରଣୀମାଳା ପ୍ରଚଣ୍ଡବେଗରେ ଉତ୍କ୍ଷିପ୍ତ
ଏବଂ ନପଉତ ହେଉ ଅଛି ।

(ଖ) ରେଖାର୍ଦ୍ଧ ଶବ୍ଦମାନଙ୍କର ସମାସ ବୁଝାଇ ଦଅ ।

(ଗ) ପଣବର୍ତ୍ତିତ, ଉତ୍କ୍ଷିପ୍ତ, ଆଲୋଚ୍ୟ ଓ ନପଉତ
ଏମାନଙ୍କର ବ୍ୟୁତ୍ପତ୍ତି ଲେଖ ।

II ସର୍ ଆଇଜାକ୍ ନଉଟନଙ୍କ ଜୀବନଚରିତ ଲେଖ ଏବଂ ପୃଥିବୀ ତାହାଙ୍କଠାରେ କେଉଁ ୨ ବିଶେଷ ସଭ୍ୟ ନମନ୍ତେ ଋଣୀ ତାହା ବୁଝାଇ ଦିଅ ।

III ନମ୍ନଲିଖିତ ପଦ୍ୟମାନଙ୍କରେ ଯେଉଁ ୨ ଐତିହାସିକ ବା ପୌରାଣିକ ଘଟଣାମାନଙ୍କର ଉଲ୍ଲେଖ ଅଛି ସେ-ମାନଙ୍କୁ ବିବୃତ କର ।

1. ଯେ ଯୁରେ ଉଦୟନ କଥା ମାଧୁରୀ
ଗଲୁପ୍ରିୟସ୍ଥଳର ଭୁଣ୍ଡୁ ହରଇ ।

2. ଇନ୍ଦ୍ର-ଭୂପତି ଜାହିଁ ଗୋମତୀ ନଇ
ସଲ୍ଲଲରେଖା ଏବେ ନେସି ହୁରଇ ।

3. ଦୌହ୍ନ ରଜ୍ଜୁ ଭେଦଣ ଶୈଲଶୃଙ୍ଗରେ
ଲଭିଲେ ସ୍ତମ ନଭ୍ୟ ଯଶଃ ମହୀରେ ।

IV (କ) ମେଘଦୂତରେ ଅନୁପ୍ରାସ କେଉଁ ୨ ଛନ୍ଦରେ ରଚିତ ? ସେହି ଛନ୍ଦମାନଙ୍କର ଲକ୍ଷଣ ଲେଖ ।

(ଖ) ଅଦ୍ୟନ ପ୍ରୟୋଗ ଓ ସୂକ୍ଷ୍ମ ପ୍ରୟୋଗ କାହାକୁ କହ ? "ସେ ଶଯ୍ୟାରେ ଶଯ୍ୟନ କରଅଛନ୍ତି" । "ନେତ୍ରୀ ଶଯ୍ୟାରେ ଅନେକ ବାଲୁକା ଥାଏ" ।

ଉଲ୍ଲଖିତ ଦୁଇ ବାକ୍ୟ ମଧ୍ୟରୁ କେଉଁଠାରେ ଆଦ୍ୟନ ପ୍ରୟୋଗ ଓ କେଉଁଠାରେ ସୂକ୍ଷ୍ମ ପ୍ରୟୋଗ ହୋଇ ଅଛି ବୁଝାଇ ଦିଅ ।

V.

ସ୍ନେହ	ବୋଧ	ଆଜ୍ଞା	ଅସ୍ତ୍ର	ଦୟା	ପ୍ରଣାମ	ଭୟ
ପ୍ରେମ	ଅପରାଧ	ଅନୁମତି	ଶସ୍ତ୍ର	କୃପା	ନମସ୍କାର	ଶଙ୍କା
ଶ୍ରଦ୍ଧା	ଘାତ			ଅନୁକମ୍ପା		ଆତଙ୍କ

ଉଲ୍ଲିଖିତ ପ୍ରତ୍ୟେକ ସ୍ତମ୍ଭନିହିତ ଶବ୍ଦମାନଙ୍କର ପରସ୍ପରଙ୍କଠାରୁକି କି ଭାବର ପାର୍ଥକ୍ୟ ଅଛି ବୁଝାଇ ଦିଅ । ଆବଶ୍ୟକ ହେଲେ ଦୃଷ୍ଟାନ୍ତ ପ୍ରୟୋଗ କରି ପାର ।

VI. "ସାହିତ୍ୟର ଅବସ୍ଥା ଜାତି ବିଶେଷର ସଭ୍ୟତାର ପରିମାପକ ଅଟେ ।" ପ୍ରବନ୍ଧମାଳାର ଏହି ମନ୍ତବ୍ୟ ଭାରତର ଦେଶୀୟ ସାହିତ୍ୟ ପ୍ରତି ପ୍ରୟୋଗ କରା ଗଲେ, ଯେଉଁ ୨ ଫଳ ପଡିବ ତାହା ବୁଝାଇ ଲେଖ ।

THURSDAY, 17TH DECEMBER, 2 TO 5 P M

URIYA · TRANSLATION AND COMPOSITION.

I. Translation into Uriya.

II. Subject of a short Essay in Uriya :—
The effect of the failure of the monsoon.

III. Translate into English :

1. ଫୁଟିବେ ତାରାବଳୀ ନୀଳ ଗଗନେ,
ଫୁଟିବ ଫୁଲ-କଲି ଫୁଲ-କାନନେ,
କୌମୁଦୀ ହସୁଥିବ କୁମୁଦ ସଙ୍ଗେ,
ପ୍ରମୋଦେ ଭାସୁଥିବ ସରସୀ-ଅଙ୍ଗେ,
ସୌଧେ, ଭୂଧରେ, ସରେ, ସ୍ୱର୍ଣ୍ଣଦୀମୀରେ,
ବିରାଜିବ ରଜତ ଜ୍ୟୋତ୍ସ୍ନା ରୁଚିରେ,
ନର୍ତ୍ତର ବିକସିତ ରଙ୍ଗବଧୁଳୀ-
ବନୁ ପରାଗ ପଡୁଥିବ ଉଚ୍ଛୁଳି,
ଦିଗ ବିଦିଗ ଦିଶୁଥିବ ଲଳିତ,
କରୁଣେ ଗାଉଥିବେ କୁରରୀ ଗୀତ,
ଦୂରେ ମାନସମୀରେ ଶଶି-ନର୍ତ୍ତନ

ସୌଧ-ଶିଖରୁ ଦିଶୁ ଥିବ ଯତନ,
ଶଶିଙ୍କୁ ଚାହିଁ, ଧୀରବାତେ ଅଥୟ,
ଶିଶିର ପିଉଥିବେ ମୁକୁଳଚୟ,
ଲଳିତା ! ତୋ ସଙ୍ଗତେ ରଙ୍ଗେ ଭ୍ରମିବି,
ଲଳିତ ତୋ ସଙ୍ଗୀତ ଚିତ୍ତ ରମିବି ।

2. ସୃଷ୍ଟିର ପ୍ରଥମଦିନ ଦୀର୍ପ୍ତିମାନ୍ ସୂର୍ଯ୍ୟ ଦିଗ୍‌ବଳୟର ପୂର୍ବରୁ ଉଦିତ ହୋଇ ଦିଗ୍‌ବଳୟର ପଶ୍ଚିମରେ ଅସ୍ତ ହେଲେ ବିଜନ ଧରଣୀର ମୁଖ ଅନ୍ଧକାର ଦ୍ୱାରା ଆଚ୍ଛନ୍ନ ହେଲା, ଏମନ୍ତ ସମୟରେ ନୀଳାକାଶ ମଧ୍ୟରେ ଗୋଟିଏ ସୁନ୍ଦର ତାରା ସ୍ୱୀୟ କ୍ଷୁଦ୍ର ମସ୍ତକ ଉତ୍ତୋଳନ କରି ଅବତୀର୍ଣ୍ଣା ହେଲା ।

3. ଭୃତ୍ୟମାନଙ୍କ ପ୍ରତି ସର୍ବଦା ସଦୟ ବ୍ୟବହାର କରିବ ଉଚିତ । ସେମାନଙ୍କୁ ପ୍ରହାର ଓ ପ୍ରଭୁତ୍ୱ ପ୍ରଦର୍ଶନ ଏବଂ ସେମାନଙ୍କ ପ୍ରତି ପରୁଷ ବାକ୍ୟ ପ୍ରୟୋଗ କରିବା କୌଣସିରୂପେ ବିହିତ ନୁହେ । ସେମାନଙ୍କ ପ୍ରତି ଏରୂପ ନ୍ୟାୟବିରୁଦ୍ଧ ବ୍ୟବହାର କଲେ ସେମାନଙ୍କର ଅନୁରାଗ ବୃଦ୍ଧି ହେବା ଦୂରେ ଥାଉ, ପ୍ରତ୍ୟୁତ କେବଳ ରୋଷ ଓ ହିଂସା ବୃଦ୍ଧି ହେଉ ଥାଏ ।

FRIDAY, 18TH DECEMBER, 10 A.M. TO 1 P.M.

ALGEBRA AND GEOMETRY.

I. (*a*) Draw a straight line from a given point, either without or in the circumference, which shall touch a given circle.

(*b*) State how many common tangents can be drawn to two given circles, and show how they are to be drawn.

II. (*a*) Inscribe a circle in a given triangle.

(*b*) If O be the centre of the circle inscribed in the triangle ABC, show that the centre of the circle circumscribed about the triangle AOB willl ie on CO produced.

III. Prove that the sides about the equal angles of equiangular triangles are proportionals; and those that are opposite to the equal angles are homologous sides, that is, are the antecedents or consequents of the ratios.

IV. If O be the centre of the circle inscribed in the triangle ABC, and OP, OQ be drawn at right angles to OA, OB respectively, cutting AB in P, Q, show that the square on CO: the rectangle contained by AC, BC : : the radius of the circle circumscribing the triangle OPQ : the radius of the circle circumscribing the triangle OAB.

V. (*a*) If $X = \sqrt[3]{r + \sqrt{r^2 + q^3}} + \sqrt[3]{r - \sqrt{r^2 + q^3}}$, find the valne of $X^3 + 3qX - 2r$.

(*b*) Find the value of

$$\frac{a}{(a-b)(a-c)(x-a)} + \frac{b}{(b-a)(b-c)(x-b)} + \frac{c}{(c-a)(c-b)(x-c)}.$$

VI. Solve the equations.

(*a*) $3x^2 + 15x - 2 = 2\sqrt{x^2 + 5x + 1}$.

(*b*) $x^2 - 2xy = 7$, $2y^2 - xy = -3$

VII. (*a*) If a is the first term of a geometric series whose common ratio is r, find the sum of n terms.

(*b*) When are quantities said to be in harmonic progression?

(*c*) If $ap = bq = c^r$ and a, b, c are in geometric progression, show that p, q, r are in harmonic progression.

VIII. (*a*) When is one quantity said to vary as another?

(*b*) If $x \propto y$, when z is constant, and $x \propto z$ when y is constant, show that x will vary as yz when both y and z vary.

(*c*) *Apply this* to find how soon 20 men will earn Rs 30, if 3 men earn Rs. 9 in 16 days.

IX. (*a*) Find the number of combinations of n things taken r at a time, *without using* the corresponding formula for permutations.

(*b*) Find in how many ways groups of 8 persons, 4 ladies and 4 gentlemen, can be formed out of 8 ladies and 9 gentlemen, subject to the condition that two particular gentlemen are not *simultaneously* to be in the same group with a particular lady.

X. (*a*) Write down the 10th term in the expansion of $(2x-y)^{11}$.

(*b*) Show that the $\overline{r+1}^{th}$ term in the expansion of $(1-2x)^{-\frac{1}{2}}$ is $\frac{\lfloor 2r}{2^r.(\lfloor r)^2} \cdot x^r$.

FRIDAY, 18TH DECEMBER, 2 P.M. TO 5 P.M.

TRIGONOMETRY AND EUCLID, BOOK XI.

I. (*a*) Prove that the circumferences of circles vary as their diameters; and give the numerical value of the ratio.

(*b*) The circular measure of an angle of a triangle is 1·30899, and another angle contains $44\dot{4}$ ..... grades; express the three angles of the triangle in terms of an angle of an equilateral triangle as unit.

II. (*a*) Find an expression for all the angles which have a given cosine.

(*b*) Find all the values of θ which satisfy the equation $\text{Cos } 4\theta + \text{Cos } 2\theta + \text{Cos } \theta = 0$, and write down the particular values which occur between $+\pi$ and $-\pi$.

III. (*a*) Express $\text{Cos } \frac{A}{2}$ in terms of Sin. A; and account for the existence of four different values from a consideration of the general formula for angles having the same sine.

(*b*) Determine the least positive and negative limits between which $\frac{A}{2}$ must lie, in order that $2 \text{ Cos } \frac{A}{2} = -\sqrt{1+\text{Sin A}} - \sqrt{1-\text{Sin A}}$.

IV. Show that—

(*a*) $\text{Cos}^2 5 + \text{Cos}^2 10 + \text{Cos}^2 15 + \ldots\ldots + \text{Cos}^2 85 + \text{Cos}^2 90 = 8\frac{1}{2}$.

(*b*) $\text{Sin}(\alpha + \delta)\,\text{Sin}(\beta - \gamma) + \text{Sin}(\beta + \delta)\,\text{Sin}(\gamma - \alpha) + \text{Sin}(\gamma + \delta)\,\text{Sin}(\alpha - \beta) = 0$.

V. (*a*) Prove directly from a figure, that in any triangle, $\frac{a}{\text{Sin A}} = \frac{b}{\text{Sin B}} = \frac{c}{\text{Sin C}}$, and that each of these ratios is numerically equal to the diameter of the circle circumscribed about the triangle.

(*b*) The feet D, E, F, of the perpendiculars from the angular points A,B,C of a triangle upon the opposite sides are joined; shew that the sides of the triangle DEF are equal respectively to *a* Cos A, *b* Cos B, *c* Cos C.

VI Prove that the perpendicular from one angle of a triangle upon the opposite side is an harmonic mean between the radii of the described circles touching the other two sides.

VII. (*a*) What is the meaning of

A Table of Natural Sines.

A Table of Logarithmic Sines.

A Table of Tabular Logarithmic Sines?

(*b*) Assuming that Sin θ, θ and Tan θ are in ascending order of magnitude, and θ the circular measure of a positive angle less than $\frac{\pi}{2}$, shew that Sin θ is greater than $\theta - \frac{\theta^3}{4}$;

(*c*) From the last result, show how we can approximate to the numerical value of the Sine of a small angle, say 10″.

VIII. The Captain of a vessel off the coast of Madras can see at one and the same time the Presidency College, Government House and the Lighthouse; and the distances between these various buildings he knows from his chart. Shew (introducing trigonometrical formulæ only where necessary) how he can find the distance of his ship from any one of these buildings, which, with the vessel, may all be considered as in one plane.

IX. Two objects, 150 yards apart, form with a third as vertex an isosceles triangle, each of the angles at the base of which is found to contain 84°.37′.15″. Find (to two places of decimals) the distance of the third object from either of the first two.

log 2 = ·3010300. L Sin 5°.22′ = 8·9709468.

log 300 = 2·4771213. L Sin 5°.23′ = 8·9722895.

log 8·0003 = ·9031063. Difference 54.

X. (*a*) What is the inclination of one plane to another? Define a pyramid, an obtuse-angled cone, a tetrahedron, and a parallelopiped.

(*b*) If three straight lines meet all at one point and a straight line stand at right angles to each of them at that point, the three straight lines shall be in one and the same plane.

(*c*) To draw a straight line perpendicular to a given plane from a given point without it.

SATURDAY, 19TH DECEMBER, 12-5 TO 2-5 P.M.

HISTORY OF ENGLAND.

I. (*a*) Show by a genealogical table how James I united in his own person the crowns of England and Scotland.

(*b*) Relate how the seeds of the Civil War were sown in his reign.

II. (*a*) Explain the circumstances which led the English to colonize America

(*b*) Give a short account of the expedition that led to the conquest of Canada by the English.

III. Write an account of the Constitutional reforms attempted by Oliver Cromwell.

IV. Give the dates on which the following battles were fought, the wars in which they occurred, and the names of the commanders on each side;—(*a*) Oudenarde, (*b*) Fontenoy, (*c*) Culloden, (*d*) Brandywine, (*e*) Camperdown.

V. Give a short account of the events which led to the Union of England and Ireland. What were the terms of the Union? Specify any particular in which those terms have since been altered.

VI. Sketch the events which led up to the Revolution of 1688.

VII. Enumerate *five* important wars which have been waged, and *five* important legislative measures which have been passed, by the English during the reign of Queen Victoria.

VIII. Draw an outline map of the continent of Europe, and mark on it:—

(*a*) the English possessions;

(*b*) the names and dates of the battles fought by Nelson and by Napoleon.

N.B. No marks will be assigned unless the map be *neat* and *clean* and sketched with a *fair* degree of *accuracy*.

SATURDAY, 19TH DECEMBER, 10 A.M. TO 12 NOON.

HISTORY OF GREECE AND ROME.

I. What causes, geographical and political, tended to make Athens the intellectual centre of Greece?

II. (*a*) Sketch briefly the part played by Sparta in the Persian Wars between B. C. 500 and B. C. 479.

(*b*) Into what epochs may the Peloponnesian War be divided? Assign reasons.

(*c*) State the political consequences of that war.

III. With reference to each of the following battles mention (1) the date, (2) the states or nations between whom it was fought, and (3) the causes and the political consequences of the war in which it occurred: *Leuctra, Chaeroneia* (first battle), *Issus*, and *Pydna*.

IV. (*a*) Write brief notes on the following:—Ostracism, the Amphictionic Council.

(*b*) Describe briefly the nature of the Greek colonies with reference to (1) the circumstances that gave rise to them, (2) their constitution, and (3) their relation to the mother country.

(*c*) What influence did the colonies of Alexander exercise on the civilization of Asia?

V. Show by a careful comparison of the earliest constitution of the Greeks, the Romans, and the English, that they belonged to a common stock.

VI. What was meant by the *Comitia tributa*? What powers did that assembly originally possess? And how were they subsequently increased?

VII. Sketch very briefly the history of Pompey's career.

VIII. (*a*) State exactly the meanings of *Augustus* and *Imperator*?

(*b*) 'The establishment of the Roman empire was not a *formal* revolution.' Explain this.

IX. With reference to the battles of Caudium and Cannæ, you are required to give (1) the date of each, (2) the names of the generals on either side, (3) the victorious party, (4) the name of the war in which the battle was fought, (5) the circumstances that gave rise to this war, and (6) its immediate political results.

SATURDAY, 19TH DECEMBER, 3 TO 5 P.M.

LOGIC.

I. What kinds of words can stand as the subject of a proposition, and what words are excluded?

Describe the logical characters of the following terms *Water, King of France, Library.*

II. What do you understand by the connotation of a term? What words are regarded as connotative? Is a 'singular' term connotative or non-connotative?

Is the term "Victoria" that denotes a number of objects a *general* name?

Taking four terms show that 'denotation' and 'connotation' vary inversely.

III. How does a proposition in Logic differ from a sentence in Grammar.

What is meant by the statement that negative propositions distribute their predicates?

Write down the common 'square of opposition' and point out what inferences respecting the other propositions can be deduced from the denial of "O."

Trace the steps by which the several propositions in group *A* may be deduced from the corresponding propositions in group *B*:

B		*A*	
1.	All S is P;	1.	Some not—S is not P;
2.	Some S is not P;	2.	Some not—P is not not—S;
3.	No S is P.	3.	Some not—S is P.

IV. Show from the general canons of the syllogism that (1) if the middle term be the subject of the major premise, the minor must be affirmative: and that (2) if the major premise be particular, the minor cannot be negative.

Reduce "Felapton" (1) directly and (2) indirectly. Can you reduce it to the Second Figure?

V. (*a*) What is the logician's use of the word 'some'? Do you see any advantage in this use of it?

(*b*) Is the Hypothetical Syllogism fully defined as a syllogism whose major premise is a hypothetical proposition?

(*c*) A 'Definition' should state the *essential attributes* of a thing. Explain.

(*d*) State the rules of 'Division.'

(*e*) Construct syllogisms to show that from false premises true, as well as false, conclusions may be drawn.

VI. Reduce to syllogistic forms, naming mood and figure:

(1) 'They must, as men, have faults.'

(2) 'He is not here, for I don't see him.'

(3) 'There are organised bodies to whose existence air is necessary, and which have no locomotive power, as plants for instance.'

B. A. DEGREE EXAMINATION, JANUARY, 1886.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M.

ENGLISH POETRY.

Quality is required—not Quantity.

In answering I (a) (c) (d), II (a) (b), IV (a) (b), illustrate with quotation from the text.

Use your own words to explain your meaning—do not write out long passages from commentaries and school editions.

I. (a) Analyze the characters of Coriolanus, Aufidius, and Menenius, and examine the conduct of each from the point of view of pure patriotism.

(b) Coriolanus is twice charged with being a Traitor. To what extent is the term justifiable on the second occasion?

(c) "There is hardly a play that has not a perfect woman in it, stedfast in grave hope, and errorless purpose: * * * * * and last, and perhaps loveliest, Virgilia, are all faultless; conceived in the highest heroic type of humanity." Remark upon this statement.

(d) The mob has been the subject of much various criticism. Give your own opinion, with reasons.

II. (a) What was the scheme which the Princess proposed to herself?

(b) "No project can succeed which goes in the face of human nature." Illustrate this truth from the story of the Princess, and show that it had made itself felt even before the arrival of the Prince.

III. (a) How came it to pass that Philip van Artevelde was chosen to rule over Ghent?

(b) With what internal difficulties had he to contend at starting?

IV. (*a*) In what manner and to what extent do Shakespeare and Taylor make use of humour (in the text books) ?

(*b*) How far is the latter successful ?

V. Relate briefly in narrative form, and in simple language, the events comprised in one only of the following :—

Coriolanus Act V

or

Philip van Artevelde Act V

or

Princess, Part II.

VI. (*a*) Rewrite the following three passages as verse, punctuating, dividing into feet, marking accents, underlining extra syllables—(according to this pattern

Go máke | thysélf | like a nymph | o' the séa; | be súbject |)

1. This double worship where one part does disdain with cause the other insult without all reason where gentry title wisdom cannot conclude but by the yea and no of general ignorance it must omit real necessities and give way the while to unstable slightness purpose so barred it follows nothing is done to purpose.

2. And all her falser self slipt from her like a robe and left her woman lovelier in her mood than in her mould that other when she came from barren deeps to conquer all with love and down the streaming crystal dropt.

3. Yet much remains to conquer still peace hath her victories no less renown'd than war new foes arise threatening to bind our souls with secular chains.

(*b*) Characterize the versification of the several text books by three or four adjectives to each.

(*c*) In the pure Italian sonnet the rhyme formula of the quatrains is abba abba, but that of the tercets varies, the three principal types being c d e c d e, c d c d c d,

and c d e d c e. Classify Milton's sonnets according to these rules.

VII. Write brief explanatory notes on :—

(*a*) When what's not meet, but what must be, was law,
Then were they chosen; in a better hour,
Let what is meet be said it must be meet,
And throw their power in the dust.

(*b*) For ever slaves at home and fools abroad.

(*c*) A rogue of canzonets and serenades.

(*d*) Here I clip the anvil of my sword.

(*e*) Our general himself makes a mistress of him.

(*f*) Cleft from the main, and wail'd about with mews.

(*g*) We walk by high examples in this world,
Let's to the poultry yard and win our spurs.

(*h*) The subtle thief of youth.]

(*i*) The milder shades of Purgatory.

(*j*) The Oppian law.

(*k*) The repeated air of sad Electra's poet.

(*l*) The Palmyrene that fought Aurelian.

(*m*) Now lies the earth all Danaë to the stars.

(*n*) Worcester's laureat wreath.

VIII. Trace the derivation and meaning of :—anvil, gurgle, crescent, pawn, ruth, abet, jeopardy, leaguer.

MONDAY, 18TH JANUARY, 2 TO 5 P.M.

ENGLISH PROSE.

Mill on Liberty—Essays in Criticism—Silas Marner.

I. *Audi alteram partem*—What grounds are given by Mill for the observance of this maxim? [*Answer this as exhaustively as you are able.*]

II. What does Mill lay down as the principle which is entitled to govern absolutely the dealings of Society with the individual in the way of compulsion and control? With what limitations?

III. "The practice should be punished though we ought not to punish the promulgation of an argument in favour of the practice." *Examine this by the light of Mill.*

IV. "The impulse given at these three periods has made Europe what it now is"—*Mill.*

Name the periods, with their influences.

V. Give the substance of what Mill and Matthew Arnold respectively say about Marcus Aurelius in his relations to Christianity.

VI. (*a*) What positive good does Mill attribute to the teaching of Rousseau?

(*b*) What does Mill define as "the appropriate region of human liberty."

(*c*) Of whose style and of what work is Mr. Arnold speaking when he says:—

"It has glitter without warmth, rapidity without ease, effectiveness without charm?"

Express this in your own words. In case you have turned to the work so characterized to find justification for the criticism, give any illustrative examples.

(*d*) What, according to Mr. Arnold, is the reason why Mill "falls just short of being a great writer?"

VII. How does Matthew Arnold define Criticism? and what does he lay down as its true function?

VIII. Give Mr. Arnold's estimate of the literary work of the first quarter of the present century—with his reasons—as fully as you can.

IX. Sketch the history of the French Academy; and state briefly the good Mr. Arnold considers to result from such an institution.

X. To what school of philosophers was Marcus Aurelius most nearly allied? Give a sketch of his character and principles as gathered from his *Meditations.* [*Answer this question as fully as you can.*]

XI. "A novel in style should be easy, lucid, and of course grammatical. In matter it should be moral and amusing. In manner it may be realistic, or sublime, or ludicrous; or it may be all these."

State with illustrations how far Silas Marner fulfils the conditions here laid down.

XII. Trace, in some detail, the principal changes of feeling undergone by Silas Marner, the Weaver.

XIII. (*a*) What reference is there in Silas Marner to a change in the economic condition of England during the progress of the story?

(*b*) "There is hardly a servant-maid in these days who is not better informed than Miss Nancy; yet she had the essential attributes of a lady—" Give these.

XIV. A. (1) Illustrate what Mill means when he speaks of comparing "the strange respect of mankind for liberty with their strange want of respect for it."

(2) Bring out the meaning of the following:—"If he who does not believe in a future state, necessarily lies, it follows that they who do believe are only prevented from lying, if prevented they are, by the fear of hell."

B. Explain the following:—

(*a*) The deep slumber of a decided opinion.

(*b*) An Englishman who lives to read, and does not read to live, may, &c.

(*c*) That promised land it will not be ours to enter, and we shall die in the wilderness.

(*d*) The note of provinciality.

(*e*) The man is not enough without the moment.

(*f*) Force, till Right is ready.

(*g*) Christianity grew up in the catacombs, not in the Palatine.

(*h*) The Indian virtue of detachment.

C. State by whom, to whom, and under what circumstances the following were spoken:—Also explain each.

(1) I'd have you remember, Sir, my property has got no entail on it.

(2) There's drawing of lots in the Bible, mind you.

(3) You never hold trumps, you know—I always do.

(4) It isn't every queer-looksed thing as Old Harry's had the making of.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P M.

ENGLISH LANGUAGE.

I. Paraphrase :—

If any vague desire should rise,
That holy Death ere Arthur died
Had moved me kindly from his side,
And dropped the dust on tearless eyes;

Then fancy shapes, as fancy can,
The grief my loss in him had wrought,
A grief as deep as life of thought,
But stayed in peace with God and man.

I make a picture in the brain;
I hear the sentence that he speaks;
He bears the burthen of the weeks,
But turns his burthen into gain.

His credit thus shall set me free;
And, influence-rich to soothe and save,
Unused example from the grave
Reach out dead hands to comfort me.

II Write short notes explaining the archaisms, and difficult words and constructions in the following passage :—

The ends of all, who for the scene do write,
Are, or should be, to profit and delight.
And still't hath been the praise of all best times,
So persons were not touched, to tax the crimes.
Then, in this play, which we present to-night,
And make the object of your ear and sight,
On forfeit of yourselves, think nothing true:
Lest so you make the maker to judge you.
For he knows, poet never credit gained

By writing truths, but things like truths well-feigned
If any yet will, with particular sleight
Of application, wrest what he doth write;
And that he meant, or him, or her, will say;
They make a libel, which he made a play.

III. Turn into good modern prose, without unnecessary alteration:—

Surely I suppose this but a vain conceit of simple men, which judge things by their effects, and not by their causes, for I will rather think the cause of this evil, which hangeth upon that country, to proceed rather of the unsoundness of the counsels and plots, which you say have been often-times laid for the reformation, or of faintness in following and effecting the same, than of any such fatal course or appointment of God as you misdeem: but it is the manner of men, that when they are fallen into any absurdity, or their actions succeed not as they would, they are ready always to impute the blame thereof unto the heavens, so to excuse their own follies and imperfections.

IV. Name (with approximate dates) the writers of any six of the following, and add notes (not exceeding half a page each) descriptive of the subject matter of any four.

1. *All for Love.* 2. *The School of Abuse.* 3. *The Sad Shepherd.* 4 *Hyperion.* 5. *Why come ye not to Court.* 6. *Locksley Hall.* 7 *The Battle of the Books.* 8. *Alastor.* 9. *The Thistle and the Rose.* 10. *Apologia pro vita sua.* 11. *Areopagitica.* 12. *Liberty of Prophesying.*

V. State Grimm's law so far as it connects English and Sanskrit.

In what forms should you expect the Sanskrit words *gau*, *pib*, *dant* and *vâhana* to appear in English?

Do such forms or nearly such exist in old or modern English?

VI. (*a*) How were strong preterites originally formed? Illustrate your meaning by an example.

(*b*) Discuss the origin of the suffix-*ing* in its several uses.

(*c*) Write philological notes on *pea*, *as*, *bondage*, *own*.

VII. Explain the phrases:—

1 *To stretch a point*; 2. *Neck or nothing*; 3. *To lose touch of*; 4 *Short commons*; 5. *To be borne in upon*; 6. *In posse*; 7 *De novo*; 8. *Ad libitum*.

VIII. Distinguish between :—

(1) Sentiment—feeling.
(2) Precision—preciseness.
(3) Refer—allude.
(4) Vestige—trace.

IX. Choose any four of the following quotations and state from what writers they are taken and to whom they refer :—

(1) Thou wert my guide, philosopher and friend.
(2) He did not steal but emplate ;
And when he would like them appear,
Their garb but not their clothes did wear.
(3) But his clear sprite
Still reigns on earth, the third among the Sons of Light.
(4) And every warbler had his tune by heart.
(5) He did on the very border stand
Of the blest promised land.
(6) The year's best sweets shall duteous rise
To deck its poet's sylvan grave.
(7) Panting time toiled after him in vain.
(8) Poor fellow! his was an untoward fate :
'Tis strange, the mind, that very fiery particle,
Should let itself be snuffed out by an article.

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

ENGLISH COMPOSITION.

I. Write an essay not exceeding ten pages on one of the following subjects :—

(*a*) The duty of a Government to encourage industrial education.
(*b*) "Next to selfishness, the principal cause which makes life unsatisfactory, is want of mental cultivation."
(*c*) The advantages of foreign travel as a part of a liberal education.
(*d*) "Words are wise men's counters, but they are the money of fools."

II The Head of a Government department has advertised in the *Fort St George Gazette* for a confidential clerk.

(*a*) Answer that advertisement by a letter giving such information about yourself as will enable him to form an opinion on your qualifications for the post

(*b*) Write a reply in the third person from the head of the department asking you to give him a personal interview.

WEDNESDAY, 20TH JANUARY, 10 A M TO 1 P M.

SANSKRIT: TEXT-BOOKS AND GRAMMAR

I. (*a*) Paraphrase in Sanskrit prose

निर्माल्यं नयनश्रियः कुवलयं वक्त्रस्यदासः शशी
कान्तिः प्रावरणंतनोर्मधुमुचो यस्यास्च वाचः
किल ।
विंशत्या रचिताञ्जलिः करतलैस्त्वां याचते
रावण -
स्तां द्रष्टुं जनकात्मजां हृदय हे नेत्राणि मित्री-
कुरु ॥
वाचः संवननं सतां रणविधिः क्लृप्तामरीवल्लभो
नेत्रोन्मादकरं वपुर्मृगदृशां हस्तावचेयं यशः ।
इत्येतस्य निसर्गसुन्दरगुणस्यैतत्परं लाञ्छनं
यात्रापात्रविवेचनं न यदभूत् सर्वस्वदानेष्वपि ॥

(*b*) Quote the Ślokas beginning with इन्दुर्लिम्प and प्रकटितरागाम्भोज, and point out their Alankāras.

(c) What is the difference between समवृत्तम् and मात्रावृत्तम्, quote from your text a Śloka composed in the Rathōddhatā, Prithvī, Praharshiṇī and Pushpitāgrā Metre, the first line need only be given.

(d) Explain the Vigraha in the following compounds —

श्रुतिचुलुकलेह्येन, कण्ठप्रणालीप्रणयिघुरुघुरा-घोरनिर्घोषनिघ्नैः, दम्भोलिव्रणगुच्छलाञ्छन-भृतः and त्रुटितनिबिडनाडीचक्रवालप्रणालप्र-सृतरुधिरधाराचर्चितोच्चण्डरुण्डम्.

(e) Transcribe into Sanskrit:

एस समरङ्गणसमासण्णकैलाससिहरणिवेसी भअवंवुसहलञ्छणो समं विसाहजणणीए देवीए पेक्खदि णंदिप्पमुहसेणावदिपरिव्वुदाणं कुमार-हेरम्बाणं रामेणसह झत्तिसमरसंरम्भविवसिदं.

II (a) Explain the Alankāras occurring in the following passages:—

अभिनवयौवनविदाहनिर्भरोष्मणि कुचतटे वैवर्ण्यमुपैति वर्णकम् and किमियं लक्ष्मीः नहि नहि तस्या हसे विन्यसं कमलम्

(*b*) Give the meaning and the Vigraha of:

प्राङ्विवाक, आत्मालीकप्रत्याकलनोपारूढ-साध्वसं, उपहसिका, अनाकस्मिकं, अवस्रंसितप्रतिसमाहितशिखण्डभारं, कुकुन्दरविभागशोभी.

(*c*) What is the difference between:

शौनक, शूद्रक and कामपाल; बन्धुमतीविनयवती and कान्तिमती; वैदिमती, यज्ञदासी and सोमदेवी; नगर, ग्राम, खर्वट and पुटभेदन?

(*d*) Who are गोमिनो, कनकलेखा, हंसावली, चण्डसिंह, मित्रगुप्त, तुङ्गधन्वा?

(*e*) Parse प्रपिप्सते, उपास्थायिषि, प्रतिसमादित्सत, उदपादि, आजिथ, अध्येषीष्ट, घोच्छति, अहसि, अचुच्यवत्, आर्पिपत्, ज्ञोप्सति, अबुबोधिषिष्ट, अबोभावि.

III. (*a*) Give the Nominative (i) Singular of अनेहस् and अर्वन्, the Instr. (iii) Plural of अप्, the Genitive (vi) Plural of जरा, the Accusative (ii) Plural of दोः, the Dative (iv) Singular of हृदय, the third Person Plural

Parasmaipada Lit of ग्रन्थ्, हृ, राज् and हि; the third Person Singular Periphrastic Future (Lut) of दृष्, लुभ् and सह्, the third Person Singular, Present Parasmaipada of the nominal verb derived from गो, विष्णु; यशस्, अश्व and तपस्.

(*b*) Point out the difference between Kṛit and Taddhita affixes.

(*c*) What happens when a long or a short vowel is followed in Prākṛit by two Consonants? How is a Compound Consonant treated in the middle of a Prākṛit word? Decline अस्मद्, I, and युष्मद्, thou, give only the more usual forms. What terminations uses the Prākṛit passive.

IV. (*a*) Name the author of the Bālaramayana and another drama ascribed to him; give also the probable date of the poet's life.

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

SANSKRIT: TRANSLATION AND HISTORY OF LITERATURE.

I. Translate into English:

(*a*) राजाधिराजनन्दन । नगरभ्रगतस्यतेगतिंज्ञा-
स्यन्नहृद्यगतः कलिङ्गान् । कलिङ्गनगरस्यनात्यासन्नसं-
स्थितजनदाहस्थानसक्तस्य कस्यचित्कान्तारधरणिज-
स्यास्तीर्ण सरसकिसलयसंस्तरेतल्लेनिषद्यनिद्रालोढदृ-

ष्टिरग्रयिषि। गलतिचकालरात्रिग्रिखण्डजालकान्धकारे
चरितरचम्बिचरितनीहारेनिजनिलयनिलीननिः शेषजने
नितान्तशीतेनिशीथे घनतरशाखिशाखान्तरालनिर्द्दा-
दिनिनेचनिंमिनींनिद्रांनिगृह्णन् कर्णदेशंगतं "कथं खले-
नानेनदग्धसिद्धेनरिरंसाकालेनिदेशंदित्सताजनएषरागे-
णानर्गलेनार्दितदृत्थंखलीकृतः, क्रियेतास्याणकनरे-
न्द्रस्य केनचिदनन्तशक्तिनासिद्धान्तरायइति" किंकर-
स्यकिंकर्यास्यातिकातरंरटितमाकर्ण्य "कएषसिद्धः काच
सिद्धिःकिम्बानेन किंकरेणकरिष्यत"इतिदिदृक्षाक्रान्त-
हृदयः किंकरगतयादिशाकिम्बिदन्तरंगतःतरलतरन-
रास्थिशकलरचितालंकारक्रान्तकायं दहनदग्धकाष्ठ-
निष्ठाङ्गाररजःकृताङ्गरागंतडिल्लताकारजटाधरंहिर-
ण्यरेतस्यरण्यचक्रान्धकाररात्रसे चणगृहीतनानेन्धनया-
सयच्चदर्चिषिदक्षिणेतरेणकरेणतिलसिद्धार्थकादीन्निर-
न्तरंचटचटायितानाकिरन्तंकम्बिदद्राक्षम् ॥

(b) प्रसक्तेर्यःपात्रंतिलकयतियंसूक्तिरचना
यश्राद्धःखादूनांश्रुतिचुलुकलेह्येनमधुना ।
यदात्मानोविद्याःपरिणमतियश्चार्थवपुषा
सगुम्फोवाणीनांकविवृषनिषेव्योविजयते ॥

(c) राक्षसः (सत्रासं) भगवन्माकोपीः वटुस्वभाव सुलभंचापलमत्रापराध्यति। कःपुनस्स्तम्भितरम्भंभगवन्तंविश्वामित्रंनजानाति.

(d) स्थितिः पुण्येरण्येसहपरिचयोहन्तहरिणैः
फलैर्मेध्यावृत्तिःप्रतिनदिचतल्पानिदृषदः।
इतीयंसामग्रीफलतिहिविरक्त्यैस्पृहयतां
वनंवागेहंवासदृशमुपशान्तस्यमनसः॥

(e) उपदिशतिसमानकर्मकृत्स्नंपिनाकी
सममपिचयतन्तेकर्त्तुमभ्यासमेते।
तदपिभृगुकुलेन्दुःकाममुत्कृष्यतेसौ
ननुभवतिनिवीतंद्रव्यमेवक्रियाभिः॥

(f) यःशृङ्गाग्रैःसरणिमरुणत्क्रौञ्चशैलःसहेलं
यातुःशम्भोर्धनुरुपनिषत्प्राप्तयेपादमूलम्।
सोयंक्रोधाद्वहतिविहितंमार्गणैर्भार्गवस्य
छिद्रद्वारंत्रिदशसरसीहंसयात्रापवित्रम्॥

(g) दुर्वृत्तसङ्गतिरनर्थपरम्परायाः
हेतुःसतांभवतिकिंवचनीयमेतत्।
लंकेश्वरोहरतिदाशरथेःकलत्रं
प्राप्नोतिबन्धमथदक्षिणसिन्धुराजः॥

(*h*) साधारणतरुबुद्ध्यानमयारचितस्तवालवालोपि ।
लज्जयसिमामिदानींचंपकसौरभ्यनिर्भरैःकुसुमैः ॥

(*i*) क्लेश.फलेनहिपुनर्नवतांविधत्ते ।

II. Translate into Sanskrit:

A stag, quenching his thirst in a clear lake, saw his own image in the water. He was struck with the beauty of his branching horns; but he felt ashamed of his slender legs. "What a pity it is," said he, "that such a noble figure as mine should owe its support to four vile broom-sticks! If my legs had been anything like my horns, there would have been no beast equal to me on the face of the earth" In the midst of this vain talk, the stag was frightened by a cry of hounds. Away he flew over the plain, and soon left the dogs and huntsmen at a great distance behind him. He might have escaped, but rushing into a forest, his horns were entangled among the branches of the trees. There he was held till the hounds came up and tore him to pieces. When dying, he cried out: "How ill do we judge of our own true advantages! The legs which I despised would have borne me away in safety, had not my favorite antlers brought me to ruin."

III. (*a*) State the twofold distinction between the first and second periods of Indian Literature.

(*b*) Give the main headings in Weber's classification of Sanskrit Literature.

(*c*) A critic says of the Mahābhārata: "The work cannot be by a single hand, nor was it the production of one epoch." Give the arguments for or against this view.

(*d*) To what periods does Weber assign the following works:—The Mahābhāshya of Patanjali, the Mrichchakati, and Pāṇini's Grammar; and for what reasons?

(*e*) How does Weber show that Bhavabhūti's works belong to the same age as Kālidāsa's?

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

GREEK: TEXT-BOOKS AND GRAMMAR.

I. (*a*) Parse ἐδωλίων, τυθείσης, ἔβαν, δόσει, προδῷς, ἐπίσχες, αἰδεσθῶ, ἐλάσῃ, ξυνῆκα, ἐξαπολλύς.

(*b*) Write down:—

the 1st Person Singular Future Indicative of πάσχω, μεθίημι, μάχομαι;

the 1st Person Singular 1st Aorist Indicative Passive of πιπράσκω;

the 2nd Aorist Infinitive of γηράσκω;

the 2nd Person Singular Imperative of οἶδα;

the 1st Person Singular Perfect Indicative Passive of φέρω;

the Future Infinitive of θνήσκω.

II. (*a*) Give the 1st Person Singular only of the Future Active, Perfect Passive, 2nd Aorist Active and 1st Aorist Passive of αἱρέω, βάλλω, γιγνώσκω, ἐσθίω, εὑρίσκω, λαμβάνω, δάκνω, τέμνω.

(*b*) Decline in the Singular only Σωκράτης, εἶδος, αἰδώς, and εὐσεβής.

(*c*) Mention with examples the principal meanings of the Middle Voice.

(*d*) Distinguish between the uses of οὐ, μὴ and μὴ οὐ.

(*e*) Give the Greek i. interrogative, ii. dependent interrogative for "*when*," "*whence*," "*how*," "*how great*"

III. Translate and explain the allusions in

(*a*) "πιθήσασα δώροισι Μίνω."

(*b*) "Λημνίοισι πήμασιν."

(*c*) "μεγάλης δὲ τύχης καὶ Ὑπερβορέου μείζονα."

(*d*) "ἔκοψα κομμὸν Ἄριον ἔν τε Κισσίας νόμοις ἰηλεμιστρίας."

(*e*) "ὅδε τοι μελάθροις τοῖς βασιλείοις τρίτος αὖ χειμὼν πνεύσας γονίας ἐτελέσθη."

(*f*) "τὰ λοιπὰ Λοξίου μαντεύματα."

IV. Translate,

ἵετε δάκρυ καναχὲς ὀλόμενον
ὀλομένῳ δεσπότᾳ,
πρὸς ἔρυμα τόδε κακῶν κεδνῶν τ',
ἀπότροπον ἄγος ἀπεύχετον
κεχυμένων χοᾶν.

(*a*) In the above passage, who is the speaker and who is addressed?

(*b*) What is the ἔρυμα referred to and what is the construction of that word with what precedes and follows respectively?

(*c*) Give the Attic for the Doric forms used in the passage.

(*d*) Account for the change of accent in ὀλόμενον and ὀλομένῳ and state why there is a difficulty in rendering the first of the two.

(*e*) Shew why the present tense ἵετε is here more appropriate than the Aorist would be, and write out in full the 2nd Aorist Imperative, Active and Middle, of ἵημι.

V. i. Translate and write grammatical notes on the underlined constructions:

εἰ γὰρ ὑπ' Ἰλίῳ
πρός τινος Λυκίων, πάτερ,
δορίτμητος κατηναρίσθης.
λιπὼν ἂν εὔκλειαν ἐν δόμοισιν,
τέκνων τ' ἐν κελεύθοις,
ἐπίστρεπτον αἰῶνα κτίσας,
πολύχωστον ἂν εἶχες
τάφον διαπεντίου γᾶς,
δώμασιν εὐφόρητον.

ii. What cases do the prepositions ὑπό and πρός govern and with what changes of meaning? Give illustrations.

VI. 1. Render into English the following phrases:—

"μή πως φύγοιμι," "δεινὸς λέγειν,"

"ἀνεξέταστος βίος οὐ βιωτὸς ἀνθρώπῳ,"

"οὐ κάθηται ἐπὶ τῷ καταχαρίζεσθαι τὰ δίκαια,"

"καὶ γὰρ τοῦτο αὐτὸ τὸ τοῦ Ὁμήρου,"

"ἐγὼ παραχωρῶ."

2. Explain the allusions in

"ξυνέφυγε τὴν φυγὴν ταύτην,"

"Ἀναξαγόρου οἴει κατηγορεῖν,"

"καὶ ἐν Ποτιδαίᾳ καὶ ἐν Ἀμφιπόλει καὶ ἐπὶ Δηλίῳ.....ἐκινδύνευον ἀποθανεῖν,"

"ὅτε ὑμεῖς τοὺς δέκα στρατηγοὺς.....ἐβουλεύσασθε ἀθρόους κρίνειν,"

"ὁπότε ἐντύχοιμι Παλαμήδει καὶ Αἴαντι τῷ Τελαμῶνος."

VII. Translate into Greek:

(*a*) I must obey the law and make my defence.

(*b*) Is there such a person or not?

(*c*) What then can he mean by saying that I am the wisest?

(*d*) I made answer then to myself and to the oracle that it was better for me to remain as I was.

VIII. i. Xenophon declares that Socrates prepared no defence. What internal evidence is there in the Ἀπολογία of artistic preparation, and what conclusion is generally drawn from that evidence?

ii. What place does the Choephorœ occupy in the Trilogy to which it belongs? What are the other

members of that Trilogy, and how is it connected with them?

III The moral of the whole play is given emphatically in two well known words, quote them

---

WEDNESDAY, 20TH JANUARY, 2 TO 5 P M

GREEK TRANSLATION.

I Translate into English

(a) καὶ τοῖς τοιούτοις οὔτε κρατῆρος μέρος
εἶναι μετασχεῖν, οὐ φιλοσπόνδου λιβὸς,
βωμῶν τ' ἀπείργειν οὐχ ὁρωμένην πατρὸς
μῆνιν δέχεσθαι, τοῦ τε συλλύειν τινά·
πάντων δ' ἄτιμον κἄφιλον θνήσκειν χρόνῳ,
κακῶς ταριχευθέντα παμφθάρτῳ μόρῳ.
τοιοῖσδε χρησμοῖς ἆρα χρὴ πεποιθέναι;
κεἰ μὴ πέποιθα, τοὔργόν ἐστ' ἐργαστέον.
πολλοὶ γὰρ εἰς ἓν ξυμπίτνουσιν ἴμεροι—
θεοῦ τ' ἐφετμαὶ, καὶ πατρὸς πένθος μέγα,
καὶ προσπιέζει χρημάτων ἀχηνία—
τὸ μὴ πολίτας, εὐκλεεστάτους βροτῶν,
Τροίας ἀναστατῆρας εὐδόξῳ φρενὶ,
δυοῖν γυναικοῖν ὧδ' ὑπηκόους πέλειν.
θηλεῖα γὰρ φρήν· εἰ δὲ μὴ, τάχ' εἴσεται.

(b) ἴστω δ' ὅστις οὐχ ὑποπτέρως
φροντίσιν δαεὶς, τὰν ἁ παιδολυ-
μὰς τάλαινα Θεστιὰς μήσατο
πυρδαῆ τινα πρόνοιαν,
καταίθουσα παιδὸς δάφοινον
δαλὸν ἥλικ', ἐπεὶ μολὼν
ματρόθεν κελάδησε,
ξύμμετρόν τε διαὶ βίου
μοιρόκραντον ἐς ἅμαρ·

(c) ΟΡ. Πυλάδη, τί δράσω ; μητέρ' αἰδεσθῶ κτανεῖν ;
ΠΥ. ποῦ δὴ τὰ λοιπὰ Λοξίου μαντεύματα
τὰ Πυθόχρηστα, πιστὰ δ' εὐορκώματα ;
ἅπαντας ἐχθροὺς τῶν θεῶν ἡγοῦ πλέον.
ΟΡ. κρίνω σε νικᾶν, καὶ παραινεῖς μοι καλῶς.
ἕπου· πρὸς αὐτὸν τόνδε σὲ σφάξαι θέλω·
καὶ ζῶντα γάρ νιν κρείσσον' ἡγήσω πατρός.
τούτῳ θανοῦσα ξυγκάθευδ,' ἐπεὶ φιλεῖς
τὸν ἄνδρα τοῦτον, ὃν δ' ἐχρῆν φιλεῖν, στυγεῖς.
ΚΛ. ἐγώ σ' ἔθρεψα, νῦν δὲ γηρᾶναι θέλω.
ΟΡ. πατροκτονοῦσα γὰρ ξυνοικήσεις ἐμοί ;
ΚΛ. ἡ μοῖρα τούτων, ὦ τέκνον, παραιτία.
ΟΡ. καὶ τόνδε τοίνυν μοῖρ' ἐπόρσυνεν μόρον.
ΚΛ. οὐδὲν σεβίζει γενεθλίους ἀρὰς, τέκνον ;
ΟΡ. τεκοῦσα γάρ μ' ἔῤῥιψας εἰς τὸ δυστυχές.
ΚΛ. οὔτοι σ' ἀπέῤῥιψ' εἰς δόμους δορυξένους.
ΟΡ. διχῶς ἐπράθην, ὧν ἐλευθέρου πατρός.

(d) Μετὰ ταῦτ' οὖν ἤδη ἐφεξῆς ἦα, αἰσθανόμενος μὲν καὶ λυπούμενος καὶ δεδιὼς ὅτι ἀπηχθανόμην, ὅμως δὲ ἀναγκαῖον ἐδόκει εἶναι τὸ τοῦ θεοῦ περὶ πλείστου ποιεῖσθαι. ἰτέον οὖν, σκοποῦντι τὸν χρησμὸν τί λέγει, ἐπὶ ἅπαντας τούς τι δοκοῦντας εἰδέναι. καὶ νὴ τὸν κύνα, ὦ ἄνδρες Ἀθηναῖοι,—δεῖ γὰρ πρὸς ὑμᾶς τἀληθῆ λέγειν —ἦ μὴν ἐγὼ ἔπαθόν τι τοιοῦτον· οἱ μὲν μάλιστα εὐδοκιμοῦντες ἔδοξάν μοι ὀλίγου δεῖν τοῦ πλείστου ἐνδεεῖς εἶναι ζητοῦντι κατὰ τὸν θεόν, ἄλλοι δὲ δοκοῦντες φαυλότεροι ἐπιεικέστεροι εἶναι ἄνδρες πρὸς τὸ φρονίμως ἔχειν. δεῖ δὴ ὑμῖν τὴν ἐμὴν πλάνην ἐπιδεῖξαι, ὥς περ πόνους τινὰς πονοῦντος, ἵνα μοι καὶ ἀνέλεγκτος ἡ μαντεία γένοιτο. Μετὰ γὰρ τοὺς πολιτικοὺς ἦα ἐπὶ τοὺς ποιητὰς τούς τε τῶν τραγῳδιῶν καὶ τοὺς τῶν διθυράμβων καὶ τοὺς ἄλλους, ὡς ἐνταῦθα ἐπ' αὐτοφώρῳ κατα-

ληψόμενος ἐμαυτὸν ἀμαθέστερον κείνων ὄντα. ἀναλαμβανων οὖν αὐτῶν τὰ ποιήματα, ἃ μοι ἐδόκει μάλιστα πεπραγματεῦσθαι αὐτοῖς, διηρώτων ἂν αὐτοὺς τί λέγοιεν, ἵν' ἅμα τι καὶ μανθάνοιμι παρ' αὐτῶν.

(e) Ἴσως δ' ἂν οὖν εἴποι τις, Εἶτ' οὐκ αἰσχύνει, ὦ Σώκρατες, τοιοῦτον ἐπιτήδευμα ἐπιτηδεύσας, ἐξ οὗ κινδυνεύεις νυνὶ ἀποθανεῖν; Ἐγὼ δὲ τούτῳ ἂν δίκαιον λόγον ἀντείποιμι, ὅτι Οὐ καλῶς λέγεις, ὦ ἄνθρωπε, εἰ οἴει δεῖν κίνδυνον ὑπολογίζεσθαι τοῦ ζῆν ἢ τεθνάναι ἄνδρα ὅτου τι καὶ σμικρὸν ὄφελος ἐστιν, ἀλλ' οὐκ ἐκεῖνο μόνον σκοπεῖν, ὅταν πράττῃ τι, πότερον δίκαια ἢ ἄδικα πράττει καὶ ἀνδρὸς ἀγαθοῦ ἔργα ἢ κακοῦ. φαῦλοι γὰρ ἂν τῷ γε σῷ λόγῳ εἶεν τῶν ἡμιθέων ὅσοι ἐν Τροίᾳ τετελευτήκασιν, οἵ τε ἄλλοι καὶ ὁ τῆς Θέτιδος υἱός, ὃς τοσοῦτον τοῦ κινδύνου κατεφρόνησε παρὰ τὸ αἰσχρόν τι ὑπομεῖναι, ὥστε ἐπειδὴ εἶπεν ἡ μήτηρ αὐτῷ προθυμουμένῳ Ἕκτορα ἀποκτεῖναι, θεὸς οὖσα, οὑτωσί πως, ὡς ἐγῷμαι, Ὦ παῖ, εἰ τιμωρήσεις Πατρόκλῳ τῷ ἑταίρῳ τὸν φόνον καὶ Ἕκτορα ἀποκτενεῖς, αὐτὸς ἀποθανεῖ· αὐτίκα γάρ τοι, φησί, μεθ' Ἕκτορα πότμος ἑτοῖμος· ὁ δὲ ταῦτ' ἀκούσας τοῦ μὲν θανάτου καὶ τοῦ κινδύνου ὠλιγώρησε, πολὺ δὲ μᾶλλον δείσας τὸ ζῆν κακὸς ὢν καὶ τοῖς φίλοις μὴ τιμωρεῖν, Αὐτίκα, φησί, τεθναίην δίκην ἐπιθεὶς τῷ ἀδικοῦντι, ἵνα μὴ ἐνθάδε μένω καταγέλαστος παρὰ νηυσὶ κορωνίσιν, ἄχθος ἀρούρης.

(f) Τιμᾶται δ' οὖν μοι ὁ ἀνὴρ θανάτου. Εἶεν. ἐγὼ δὲ δὴ τίνος ὑμῖν ἀντιτιμήσομαι, ὦ ἄνδρες Ἀθηναῖοι; ἢ δῆλον ὅτι τῆς ἀξίας; τί οὖν; τί ἄξιός εἰμι παθεῖν ἢ ἀποτῖσαι, ὅ τι μαθὼν ἐν τῷ βίῳ οὐχ ἡσυχίαν ἦγον, ἀλλ' ἀμελήσας ὧν περ οἱ πολλοί, χρηματισμοῦ τε καὶ οἰκονομίας καὶ στρατηγιῶν καὶ δημηγοριῶν καὶ τῶν ἄλλων

ἀρχῶν καὶ ξυνωμοσιῶν καὶ στάσεων τῶν ἐν τῇ πόλει γιγνομένων, ἡγησάμενος ἐμαυτὸν τῷ ὄντι ἐπιεικέστερον εἶναι ἢ ὥστε εἰς ταὐτ' ἰόντα σώζεσθαι, ἐνταῦθα μὲν οὐκ ἦα οἳ ἐλθὼν μήτε ὑμῖν μήτε ἐμαυτῷ ἔμελλον μηδὲν ὄφελος εἶναι, ἐπὶ δὲ τὸ ἰδίᾳ ἕκαστον ἰὼν εὐεργετεῖν τὴν μεγίστην εὐεργεσίαν, ὡς ἐγώ φημι, ἐνταῦθα ἦα, ἐπιχειρῶν ἕκαστον ὑμῶν πείθειν μὴ πρότερον μήτε τῶν ἑαυτοῦ μηδενὸς ἐπιμελεῖσθαι πρὶν ἑαυτοῦ ἐπιμεληθείη ὅπως ὡς βέλτιστος καὶ φρονιμώτατος ἔσοιτο, μήτε τῶν τῆς πόλεως, πρὶν αὐτῆς τῆς πόλεως· τῶν τε ἄλλων οὕτω κατὰ τὸν αὐτὸν τρόπον ἐπιμελεῖσθαι. τί οὖν εἰμὶ ἄξιος παθεῖν τοιοῦτος ὤν; ἀγαθόν τι, ὦ ἄνδρες Ἀθηναῖοι, εἰ δεῖ γε κατὰ τὴν ἀξίαν τῇ ἀληθείᾳ τιμᾶσθαι· καὶ ταῦτά γε ἀγαθὸν τοιοῦτον ὅ τι ἂν πρέποι ἐμοί.

(Not from Text-Books.)

(g) "Ὦ ἄνδρες Ἕλληνες, οὐ διὰ τοῦτο ὑμᾶς ἄγω, ὅτι ἀπορῶ ἀνθρώπων, βαρβάρων, ἀλλ' ὅτι νομίζω ὑμᾶς εἶναι ἀμείνονας πολλῶν βαρβάρων. γενέσθε οὖν ἄξιοι τῆς ἐλευθερίας ἧς ἔχετε. εὖ γὰρ ἴστε, ὅτι καὶ αὐτὸς ἐλοίμην ἂν τὴν ἐλευθερίαν ἀντὶ πάντων ὧν ἔχω. ἐγὼ δὲ, εὖ εἰδὼς εἰς οἷον ἀγῶνα ἔρχεσθε, διδάξω ὑμᾶς. οἱ μὲν γὰρ πολέμιοι ἔσονται πολλοὶ, καὶ ἐπ-ίασι πολλῇ κραυγῇ· ἐὰν δὲ ἀνά-σχησθε ταῦτα, οὐδὲν ἄλλο φοβερὸν ἔσται. καὶ γὰρ αἰσχύνομαι δὴ λέγων ὡς δειλοί εἰσιν οἱ ἐν τῇ χώρᾳ ἄνθρωποι. ἐὰν δὲ ὑμεῖς ἄνδρες γένησθε καὶ εὔτολμοι, ἐγὼ ποιήσω τοὺς μὲν βουλομένους ἀπ-ιέναι οἴκαδε ζηλωτοὺς τοῖς οἴκοι. οἶομαι δὲ πολλοὺς ὑμῶν αἱρήσεσθαι παρ' ἐμοὶ μένειν."

II. Translate into Greek:

The storm having at length passed by, the citizens returned home, but the king could nowhere be found; for Mars, his father, had carried him up to Olympus in his chariot. When it was night, as

one of the chief men was coming towards the city, the king appeared to him like one of the gods and said: "Go and tell my people not to weep for me any more; but bid them be brave and warlike; if they do this, they shall make my city the greatest in the earth." Then the citizens knew that their king was become a god.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

LATIN: TEXT-BOOKS AND GRAMMAR.

I. (*a*) Decline *Perseus, macer*, in the Singular only.

Decline *vas* (vessel), *inops*, in the Plural only.

(*b*) Give *four* nouns that have no Genitive Plural and the double forms of the Genitive Singular of *femur* and *iecur*.

(*c*) Compare *frugi, strenuus, parum*, and the adverbs formed from *honorificus, vafer, magnus*.

II. (*a*) Parse *confluxet, clueant, dêsse, consumpse*, and account for anything peculiar in the forms or endings of *inquam, celarier, potesse, dissoluuntur*.

(*b*) Give the Perfects and Supines (where found) of *capesso, adolesco, conniveo, differo, diffido, tædet*.

(*c*) What compounds of "*facio*" make their Passive in "*fio*"? Give *two* examples.

III. (*a*) Give the force of the prepositional prefixes in *denubo, debello, edormio, subdolus*, and show by derivation or otherwise how the following words acquire their usual signification:—

Anceps, coram, debilis, delirare, intelligo, intereo, profanus, prosperus, sedulus, subsidium.

(*b*) Render into equivalent idiomatic English the following phrases:—Diem ex die; non solum de die, sed etiam in diem vivere; e re publica; post diem tertium; diem concelebrare; nihil ad serium; nihil id quidem ad rem; rempublicam referret acceptam; me dius fidius.

IV. Distinguish between—Gratias agere, gratias habere, gratiam referre; præverto, prævertor; legem promulgare, legem ferre, legem figere; relegari, aqua et igni interdici; appellatus es de pecunia, in solidum appellabant; consulatus petebatur, non rogabatur, ærarium, fiscus; toga, lacerna, abolla; prædes, prædia.

V. Account for the cases of the italicised words in the following —

(*a*) Meo *unius* discrimine.

(*b*) *Maiestatis* postulatus.

(*c*) Non denique homines *dis curæ*.

(*d*) Pecunia utinam ad *Opis* maneret.

(*e*) Nec *solvendo* eras.

(*f*) Abhinc *annos* prope viginti.

(*g*) *His annis* viginti.

(*h*) Nec me *animi* fallit.

VI. (i) Fuerit ille Brutus. What use of the Conjunctive Mood is this? Show by examples how this Mood can be used independently?

(ii) Ceterum plurimis mortalium non eximitur *quin* primo cuiusque ortu ventura destinentur. Translate this passage and illustrate the various uses of "*quin*"

(iii) Quid refert utrum voluerim fieri an gaudeam factum. Explain the use of the Subjunctive Mood in this passage, and distinguish between *utrum—an* and *sive—seu*.

VII. Write brief notes on—Satira, sector, supplicatio, mirmillo, rogatio tribunicia, sortitio prærogativæ, in duplum cavere, *Unciolam* Proculeius habet sed Gillo *deuncem*, novendialis cena, chironomunta.

VIII. Explain the allusions in the following passages:—

(i) Verso pollice vulgus quem iubet occidunt.

(ii) Tæda lucebis in illa
Qua stantes ardent, qui fixo pectore fumant
Et latum media sulcum deducit arena.

(iii) De pulvino surgat equestri.

(iv) Sed periit postquam cerdonibus esse timendus
Cœperat: hoc nocuit Lamiarum cæde madenti.

(v) Tu Beneventani sutoris nomen habentem
Siccabis calicem nasorum quatuor . . . . .

(vi) Quale coronati Thrasea Helvidiusque bibebant
Brutorum et Cassi natalibus.

(vii) Neque meliorem unquam servum neque deteriorem dominum fuisse.

(viii) Sunt qui adseverent mille quadringentos sexaginta unum interici.

IX. (*a*) Quote from your Satires of Juvenal allusions to (i) the Jews, (ii) the influx of Greeks into Rome, (iii) the proper subjects of Satire.

(*b*) Give a short account of any *one* of the philosophers whom Lucretius mentions in his First Book, and show the points of difference in their respective tenets

(*c*) Enumerate the charges brought against himself, which Cicero alludes to in the commencement of the Second Philippic, and give a summary of his defence in reply to any *one* of them.

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

LATIN: TRANSLATION.

I Translate into English:

(i) Tum porro quod iam est extremum quodque cacumen
Corporis ullius, quod nostri cernere sensus
Iam nequeunt, id, nimirum, sine partibus extat
Et minima constat natura, nec fuit unquam
Per se secretum neque posthac esse valebit,
Alterius quoniamst ipsum pars, primaquo et una
Inde aliæ atque aliæ similes ex ordine partos
Agmine condenso naturam corporis explent;
Quæ quoniam per se nequeunt constare, necessest
Hærere unde queant nulla ratione revelli.
Sunt igitur solida primordia simplicitate,
Quæ minimis stipata cohærent partibus arte,
Non ex ullorum conventu conciliata,
Sed magis æterna pollentia simplicitate,

Unde neque avelli quicquam neque deminui iam
Concedit natura reservans semina rebus.
Præterea nisi erit minimum, parvissima quæque
Corpora constabunt ex partibus infinitis;
Quippe ubi dimidiæ partis pars semper habebit
Dimidiam partem, nec res præfiniet ulla.
Ergo rerum inter summam minimamque quid escit ?

(ii) Primo fige loco, quod tu discumbere iussus
Mercedem solidam veterum capis officiorum.
Fructus amicitiæ magnæ cibus; imputat hunc rex
Et, quamvis rarum, tamen imputat. Ergo duos post
Si libuit menses neglectum adhibere clientem,
Tertia ne vacuo cessaret culcitra lecto:
Una simus, ait. Votorum summa! quid ultra
Quæris ? Habet Trebius, propter quod rumpere somnum
Debeat et ligulas dimittere, sollicitus, ne
Tota salutatrix iam turba peregerit orbem
Sideribus dubiis, aut illo tempore, quo se
Frigida circumagunt pigri sarraca Bootæ.

(iii) Obtritum vulgi perit omne cadaver
More animæ; domus interea secura patellas
Iam lavat et bucca foculum excitat et sonat unctis
Striglibus et pleno componit lintea gutto!
Hæc inter pueros varie properantur : at ille
Iam sedet in ripa tetrumque novicius horret
Porthmea, nec sperat cœnosi gurgitis alnum
Infelix, nec habet quem porrigat ore trientem.

(iv) Quid enim ? Istud, quod te sacerdotii iure facere posse dixisti, is augur non esses et consul esses, minus facere potuisses ? Vide ne etiam facilius. Nos enim nuntiationem solum habemus, consules et reliqui magistratus etiam spectionem. Esto: hoc inperite; sed videte inpudentiam. Multis ante mensibus in senatu dixit se Dolabellæ comitia aut prohibiturum auspiciis aut id facturum esse, quod fecit. Quisquamne divinare potest quid vitii in auspiciis futurum sit, nisi qui de cœlo servare constituit ? Quod neque licet comitiis per leges, et, si qui servavit, non comitiis habitis, sed prius quam habeantur, debet nuntiare.

(v) Ac ne sine causa viderotur edixisse, ut senatus adesset, quum de republica relaturus fuisset, adlato nuntio de legione quarta mente concidit, et fugere festinans senatus consultum de supplicatione per discessionem fecit, quum id factum esset antea nunquam. Quæ vero profectio postea! quod iter paludati!

(vi) Interea magna vis accusatorum in eos inrupit, qui pecunias fœnore auctitabant adversum legem dictatoris Cæsaris, qua de modo credendi possidendique intra Italiam cavetur, omissam olim, quia privato usui bonum publicum postponitur. Sane vetus urbi fœnebre malum et seditionum discordiarumque, creberrima causa, eoque cohibebatur antiquis quoque et minus corruptis moribus. Nam primo duodecim tabulis sanctum, nequis unciario fœnore amplius exerceret, cum antea ex libidine locupletium agitaretur; dein rogatione tribunicia ad semuncias redactum, postremo vetita versura. Multisque plebis scitis obviam itum fraudibus, quæ totiens repressæ miras per artes rursum oriebantur. Sed tum Gracchus prætor, cui ea quæstio evenerat, multitudine periclitantium subactus rettulit ad senatum, trepidique patres (neque enim quisquam tali culpa vacuus) veniam a principe petivere; et concedente annus in posterum sexque menses dati, quis secundum iussa legis rationes familiares quisque componerent.

(vii) Cum autem dispicere cœpimus et sentire, quid simus et quid ab animantibus ceteris differamus, tum ea sequi incipimus, ad quæ nati sumus. Quam similitudinem videmus in bestiis, quæ primo, in quo loco natæ sunt, ex eo se non commovent, deinde suo quæque appetitu moventur: serpere anguiculos, nare anaticulas, evolare merulas, cornibus uti videmus boves, nepas aculeis, suam denique cuique naturam esse ad vivendum ducem. Quæ similitudo in genere etiam humano apparet. Parvi enim primo ortu sic iacent, tamquam omnino sine animo sint: cum autem paulum firmitatis accessit, et animo utuntur et sensibus conitunturque, sese ut erigant, et manibus utuntur, et eos agnoscunt, a quibus educantur deinde æqualibus delectantur libenterque se cum iis congregant dantque se ad ludendum fabellarumque auditione ducuntur deque eo, quod ipsis superat, aliis gratificari volunt animadvertuntque ea, quæ domi fiunt, curiosius incipiuntque commentari aliquid et discere.

II. Translate into Latin:

His promptitude in execution was no less remarkable than his patience in deliberation. He did not discover greater sagacity in

the choice of the measures which it was proper to pursue, than fertility of genius in finding out the means for rendering the pursuit of them successful Though he had naturally so little of the martial turn, that during the most ardent and bustling period of life, he remained in the Cabinet inactive ; yet when he chose at length to appear at the head of his armies, his mind was so formed for vigorous exertions in every direction, that he acquired such knowledge in the art of war, and such talents for command, as rendered him equal in reputation and success to the most able generals of the age

---

WEDNESDAY, 20TH JANUARY, 10 A M TO 1 P M.

PERSIAN: TEXT-BOOKS AND GRAMMAR.

I. (*a*) Give a short تذكرة of 'Umr Khayyām, and show how far his poem supports the Sūfi system :—

(*b*) Give a brief outline of Sufism.

II. (۱) * اي آن كه خلاصهٔ چار ا ركانی *
* بشنو سخن ا ز عالم روحاني *
* دبوي و ددي و ملک و انساني *
* با تست هر انچه مي نمائی آني *

(۲) * گاوي است بر آسمان و نامش پروين *
* يك گاو زمين نهفت در زير زمين *
* چشم خردت كشاي چون اهل يقين *
* زبر و زبر د و گاو و مشتي خربين *

(۳) * ای آن كه نتيجهٔ چهار و هفتي *
* در هفت و چهار دائم اندر تفتي *
* مي خور كه هزار بار پيشت گفتم *
* بار آمدنت نيست چو رفتي رفتي *

(٤) * ده عقل و نه رواق و ز هشت بهشت *
* هفت اختر م از شش جهت ابن نامه نوشت *
* کز پنج حواس و چهار ارکان و سه روح *
* ایرد بدو عالم چو تو یك کس نسرشت *

(٥) * اکنون که زند هزار دستان دستان *
* جز بادهٔ لعلی از کف مستان مستان *
* برخیز و بیا که گل بشادی می گفت *
* روزی دو سه داد خود ز بستان بستان *

(*a*) Paraphrase the above.

(*b*) Name the figures of speech in the last three Rubāiyāt.

(*c*) Analyse the first Rubāi.

(*d*) Scan any one of the Rubāiyāt.

(*e*) Khāyyam in the second Rubāi uses پروبن instead of ثور What figure of speech is this ?

III. Write briefly in a modern Persian style one of the following stories :—

شیر و خرگوش - سنگ پشت و کژدم - باغبان و خرس - باز بامرغ خانگي - بازرگان که صد من آهن بخانهٔ دوستي و دیعت نهاد *

IV. Name the fourteen maxims given by Hushang.

V. Mention—

(*a*) the seven metres which may be used for a Musnavi poem, and scan them ;

(*b*) a few زحافات of the بحور

VI. Give examples of the three following kinds of style :—

عارِي - مُسَجَّع - مُرَجَّز

VII. Give (*a*) the literal and (*b*) the technical meanings of the following :—

اعراب - ایهام - عروض - توشیح - روی - تلمیح - استعاره - ادماج - توجیه - سجع - لف و نشر - رقطا *

VIII. (*a*) Before what names are the following words used to express number :—

منزل - فرد - عدد - قبضه - دانه - طاقه - ضرب - راس - زنجیر - قطعه - سلک - دست *

(*b*) Give (in the same language) words which express the exact opposite of the following :—

ناز - عزّه - اوج - هلال - خسوف - خرج *

IX. Distinguish between—

حال and قال : شك and ظن · حوصله and معده : نکره and جنس *

X Re-write the following in modern colloquial Persian —

(۱) مرتبان اچار بیار (۲) دو تا بیضهٔ مرغ نیم برشت بکن (۳) در بهل دخاني آمدید (۴) مي خواهم که نوکران را معرول کنم (۵) درجره کسی نیست *

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

PERSIAN: TRANSLATION.

I Translate into Persian:

The Afghans, as a fighting race, recently displayed all the characteristics which have so often proved embarrassing to British Commanders. They are, in the first instance, beaten without difficulty, upon being regularly attacked, and then seem ready to tender a virtual submission. But they soon rally again for resistance, and await a favorable moment for assailing their conquerors. If they

find their enemy placed at any disadvantage, they are wonderfully prompt and skilful in seizing their opportunity Their clans muster rapidly in thickly gathering numbers, and every husbandman is a ready-made soldier after his kind. The word passes round, and all the men of the fighting age turn out under arms instantly. This is the reason why it so often becomes impossible for British Commanders to learn the strength of the Afghan forces in the field. It would not be just to blame British officers for failing to ascertain that which is not ascertainable. The Afghans are in their homes one day, apparently non-combatants, the next day they are in the field arrayed for battle, a few days afterwards they are in their villages again, assuming the appearance of peaceable inhabitants. This description is applicable to the country around Cabul and to Northern Afghanistan, but in a much less degree to the country around Candahar.

II. Translate into English:

(a) آورده اند که روباهي در بيشه ببوي طعمه هر طرف مي گشت - نطرش بمرغ خانگي افتاد که زير درختي منقار بر زمين مي زد - در کمين شده خواست که او را صيد کند - ناگاه طبلي آويخته در پهلوي درخت ديد که از رسيدن شاخ درخت آواز سهمگين از ان بر آمدی - از جثهٔ فربه و آواز مهيب او را جانور نيم مُرده خيال کرده بخود انديشيد که گوشت و پوست او در خور جثه و آواز خواهد بود - از کمين مرغ بر امد و روی بدرخت نهاد - مرغ ازان واقعه آگاه شده رو بگريز نهاد - روباه بصد محنت ببالاي درخت بر امده ميکوشيد تا آن طبل را بدريد - جز پوستي خُشک و چوبي درشت نيافت - آتش پشيماني در دل او افتاد و آب پريشاني از ديده باريدن

گرفت - و گفت که دریغ بواسطهٔ این نمود بي
بود از بهبود خود بار آمدم *

(فطعه) * دهل در فغان است دائم ولي *
* چه حاصل که اندر میان هیچ نیست *
* گرت دانشي هست معني طلب *
* صورت مشو غرّه کان هیچ نیست *

(۱) * پیش از من و تو لیل و نهاري بود ست * (b)
* گردنده فلک براي کاري بود ست *
* زنهار قدم بخاک آهسته نهی *
* کان مردمک چشم نگاري بود ست *

(۲) * نا کرده گناه در جهان کیست بگو *
* آن کس که گنه نکرد چون زیست بگو *
* من بد کنم و تو بد مکافات دهی *
* پس فرق میان من و تو چیست بگو *

(۳) * گر دست دهد ز مغز گندم نانی *
* وز مي کدوي زگوسفندي رانی *
* با ماه رخي نشسته در ویرانے *
* عیشي ست که نیست حد هر سلطاني *

(۴) * گر روي زمین بجمله آباد کني *
* چندان نبود که خاطري شاد کني *
* گر بنده کني بلطف آزادي را *
* بهتر که هزار بنده آزاد کني *

(٥) * تا در ہوس لعل لب و جام مئي *
* يا ذر پئي آواز دف و بانگ نئي *
* اين ہا همه حشو است خدا مي داند *
* تا ترک تعلق نكني مرد نئي *

(٥) مستي از خانه بيرون آمد و درميان راه بيفتاد و رد كرد و لب و دهان خود بيالود - سگي آمد آن را مي ليسيد - پنداشت كه آدمي است آن را پاک مى كند دعا كرد كه خداي تعالي فرزندان ترا خدمتگار تو كناد - بعد ازان سگ پاي برداشت و بر روي وي بول كرد - گفت بارک الله اي سيّدي آب گرم آوردي تا روي مرا بشوئي *

(قطعه)

* شراب خواره چو بر خويشتن روا دارد *
* كه سبلت از قئي ناپاک مي بيالايد *
* سگ ازمثانه گرابريق آب گرم آرد *
* كه غسل سبلت ناپاک او كند شايد *

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 12 NOON.

URDU: TEXT-BOOKS AND GRAMMAR.

I. آرايش محفل كے مصنف كا نام - سن تولد و رحلت و وطن اوْر اس كے دو تصنيفات بيان كرو *

II. * گزا رش گرد فتر خسروان *
* كرے يون ہي مہد گزا رش روان *

سپاہان میں پہنچا جبہیں شہر یار *
* بداد و دہش کي کمر استوار *
* کیا شاہ نے موقوف چندے سفر *
* محل ہاي دارا کي دھونڈھي خبر *
* بہت مال بہیجا بمشکوي شاہ *
* کیا سرخ شادي سے رنگ سیاہ *
* شکیبا رہا تین دن یا چہار *
* شکفتہ ہو تا غنچۂ نو بہار *
* عروسین بزیور کشي خو کرین *
* سر و تن کو وہ نار نیکو کرین *
* تمناي گل سے ہو وہ پر دماغ *
* کرین وہ نظر سوے روشن چراغ *
* ہوا جب کہ واقف شہ نامور *
* کہ اب سوگ کا ہي نہین کچھہ اثر *
* کہا تب ارسطو سے اي کان گنج *
* بمشکوے دارا تو ہو راہ سنج *
* کہو جا کے اہل حرم سے کہ شاہ *
* اسي سے یہان پر ہي آرام خواہ *
* کہ تا روے مہر وے دارا نزاد *
* وہ دیکھے کہ ہو دل شاہ شاد *

(a) نظم بالا مذکور کو با محاورہ نثر مین لاؤ اؤر نثر کا خلاصہ اپني عبارت مین رقم کرو *

(b) ان الفاظ کي تشریح کرو جن کے نیچے لکیر ہین *

(c) کسي مصرعہ کي تقطیع کرو اؤر بحر بتاؤ *

(d) دوسري بیت کي ترکیب کرو *

(e) ساتوین بیت کے دوسرے مصرعہ مین کس لئے لفظ وہ واحد استعمال کیا گیا حالانکہ فعل اس کا بصیغۂ جمع ہي *

III. ان الفاظ کي معني انگریزي مین لکھو *

بلا تامل و تعلّل - پژهنت - تیرتهہ - بے اِعتنائي - حالي هونا - پاشنہ کوب - رطل گران - رسالہ غیر آئین - کام آنا - غبارہ - جان بر هونا - بیکنٹهہ باسي ہونا *

IV. ان سوالات کے جوابات دو *

(a) ولادت سکندر کے باب مین کیا مختلف روایات ہین *

(b) سکندر کو فریب و دغا سے کؤن قتل کئے *

(c) دارا سکندر کو کیا وصیّت کیا *

(d) هندؤن مین سینبر کون سے دستور کا نام ہي *

V. شعر کا کونسا رکن صدر - ضرب - ابتدا - عجز - اؤر حشو کہلاتا ہي *

VI. بحر ہزج - بحر تقارب - بحر رجز - بحر رمل اؤر بحر کامل کے ارکان تحریر کرو *

VII. اگر کسي جملے مین فعل ناقص ہو تو اُس کی ترکیب مین مسند الیہ اؤر مسند بہ کو کیا نام دیتے ہین - اؤر وہ جملہ فعلیہ ہوگا یا اسمیّہ *

VIII. فاعل ۔ مفعول بہ ۔ مفعول فیہ ۔ مفعول معہ ۔ مفعول مطلق ۔ اور مفعول لہ کون سے لفظ سے سوال کرنے سے معلوم ہوتے ہیں *

WEDNESDAY, 20TH JANUARY, 12 NOON TO 2 P.M.

URDU: TRANSLATION.

I. Translate into Urdu:

(*a*) India will, on a comparison of her raw products with those of other nations, be found to exhibit only a second-rate quality in many of those articles, for the production of which she has long been famed. For instance, her raw silks are not equal in excellence to those of China or Italy. Her produce of sugar-cane is inferior in richness to that of Jamaica; her spices have less pungency than those of Ceylon, the West Indies, or the Islands of the Eastern Archipelago. Her cotton is far surpassed by that of South America. Though some kinds of her rice, grown in limited quantities, are of unsurpassed fineness, still the quality of her abundant sorts is excelled by that of the Carolina rice. Her maize is below the standard of Southern Europe; her wheat, though beginning to be esteemed and exported, cannot rival in quality the wheat of Great Britain or of the United States. Her indigenous vegetables and fruit cannot be compared with those of European countries.

(*b*) Character is made up of small duties faithfully performed,—of self-denials, of self-sacrifices, of kindly acts of love and duty. The backbone of character is laid at home; and whether the constitutional tendencies be good or bad, home influencies will, as a rule, fan them into activity. "He that is faithful in little is faithful in much; but he that is unfaithful in little is unfaithful also in much." Kindness begets kindness, and truth and trust will bear a rich harvest of truth and trust.

(c) (1) I regret he did this. It is just like him,

(2) It was no less a person than the Governor.

(3) Your hesitation is as injurious to the progress of this affair as their rashness.

(4) Take him for all in all, I shall not look upon his like again.

II. (a) قصه مختصر جب که بیاس دیو کو کثرت اعمال و اشغال سے حالت کشف کي حاصل ہوي - اؤر آنکهه اس کے دل کي کهل گئی - تب طبیعي و ریاضي و منطق و مناظرہ بلکه سارے علوم متعارف و غیر متعارف اس کو بدون تحصیل حاصل ہوے - آخرالامر اسرار سماوي و ارضي بهي اس پر کهل گئے - في الواقع بید ابتداي خلقت مین الهام سے برهها کي زبان پر جاري ہوا لیکن بیاس دیو نے اس کے چار حصے کر کے ہر ایک کا ایک نام جدا رکها *

(b) * یکا یک ہوی آتش کینه تیز *
* ہوا مستعد کینه‌ور باستیز *
* بجا دونون لشکر مین پهر طبل جنگ *
* پڑا لرزہ اندر دل کوہ و سنگ *
* ہوا نای ترکي کا اتنا خروش *
* که آیا دل پهلوانون مین جوش *
* طراقا ہوا چابکون کا بلند *
* کهپے دل باواز سم سمند *
* روا رؤ برائي زراہ نبرد *
* هرا هر درائي بمیدان مرد *

* کہے تو کہ گویا زمین پھٹ گئي *
* درخت مروّت کي جڑ کٹ گئي *
* بسمِ ستوران دران پہن دشت *
* زمین شش شد و آسمان گشت هشت *

(c) هماري ساتهہ جو فوج هندوستاني تهي اس کي نمک حلالي اوْر وفاداري بيرون از تحرير و تقرير هي کيونکہ باوجوديکہ ان کو کهانا بهي اچها نهين ملتا تها اوْر مکان بهي انکے واسطے موافق نہ تهے اوْر ان کے مقام پر خصوصاً ۱۳ رجمنٹ کے قيام گاہ پر دشمنون کي گوليان اس کثرت سے پڑتي تهين کہ انکے آدمي بہت ضائع هوگئے تهے اوْر وہ مفسدين کے نزديک اس قدر تهے کہ آپس مين گفتگو هوا کرتي تهي اوْر مفسد هر طور سے ان کو فهمايش کرتے تهے اوْر باغ سبز دکهاتے تهے مگر اُنهون نے هماري رفاقت سے تن دزدي نہ کي *

(d) * کرتا هي قتل عام وہ اغيار کے لئے *
* دس بيس روز مرتے هيں دو چار کے لئے *
* دل عشق تيرے نذر کيا جان کيونکہ دون *
* رکها هي اس کو حسرت ديدار کے لئے *
* لے تو هي بهيجدے کوئي پيغام تلخ اب *
* تجويز زهر هي تيرے بيمار کے لئے *
* جي مين هي موتيون کي لڑي اسکو بهيج دون *
* اظهار حال چشم گهر بار کے لئے *

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 12 NOON.

TAMIL: TEXT-BOOKS AND GRAMMAR.

I. (a) கார்முகம் வில்லின பெயரானபோது என்ன மொழி ?

(b) அல்லாதபோது என்னத்தின் பெயராகும் ?

(c) மூகத்தோடு வேறு அடைபெற்று நினறு அதனை யுடைய பொருளை உணர்த்திய தமிழ்ச்சொறகள இரண்டும் அவறறின் அர்த்தமும் எழுதுக.

II. (a) அனிந்திதை கமலினி என்பவர்கள் யாவர் ?

(b) இவர்கள் பூமியிற் பிறந்தபோது என்னபெயர் வகித்திருந்தார்கள் ?

(c) சோமசுந்தரபாண்டியனது திருக்கலியாணததில் வந்து பணிவிடைசெய்த சுவர்க்கநாட்டு ஸ்திரிகளின் பெயரென்ன ?

(d) ஊர்ப்பசி யாது நிரிவு பெற்றது ?

(e) இத்திரிவிற்கு வேறுதாரணம் இரண்டு காட்டுக.

III. (a) பின்வருஞ் சொற்களின் அர்த்தமென்ன ?
காளிமை, ஏதி, பஞ்சரம், அதவம், ஆதன, சரளம், தமிலம், பல்லம் ; நிம்பம், குதம்பை, சுவாகதம், தத்தி ; அவ்விததல், பாத்தல், படிறு, புதல்.

(b) இவற்றில் இரண்டு சொல்லின் பிரயோகத்திற்கு இராமாயணத்திலும், இரண்டிறகுத் திருவிளையாடற்புராணத்திலும், இரண்டிறகுக் குறளிலுமிருந்து வாக்கியம் எழுதுக.

IV. (a) திசைகட்டிய மால்கரி தெட்டமதப்
பசைகட்டின ஒட்டின பற்பலபோர்
விசைகட்டழி தானவர் விட்டவர்பேர்
இசைகட்டிய வொத்திவர் சாமளையாள்.
தெரிசிக்க வந்த சிலதேவர் சிறைப்பு ஞர்தி

வெருவிப் பறந்த வொழிந்தோர்மிலங் கூர்தி
மானங்
கருவிப் படையாற் சிதைபட்டன கால னூர்தி
குருதிப்புன லுக்கது கொற்றவை யுண்ட தென்ன.
இவைகளுக்குப் பதவுரை எழுதுக.

(b) i. முதற் செய்யுளை என்ன விருத்தமாக இங்கே பிரித்திருக்கின்றது ?

ii. அதனைக் கலிவிருத்தமாக அலகிடுக.

(c) i. இரண்டாவதன் சந்தம் யாது ?

ii. தாழிசை தனை விருத்தத்தில் அஃது எந்த இனம் ?

iii. தரிசிக்க என்று பாடபேதம் பண்ணலாமா ? ஏன் ?

V. (a) நத்தம்போற் கேடு முளதாகுஞ் சாக்காடும்
வித்தகர்க் கல்லா லரிது.

இதற்கு விரிதவுரை எழுதுக.

(b) "நத்தம்போற் கேடுமுள தாகுஞ்சாக் காடும்" என்று அலகிடலாமா ? ஏன் ?

(c) நத்தம் என்னுஞ் சொல்லின் பிறப்புக் கூறுக.

(d) போல் இங்கே என்ன சொல் ?

(e) கேடு என்பதைப் பதமுடிக்க.

(f) சாக்காடு என்ன விகுதிபெற்றது ? இவ்விகுதிக்கு வேறிரண்டு உதாரணங் காட்டுக.

VI. (a) பின்வரும் வாக்கியங்களின் அர்த்தம் எழுதுக :—

"வெங்சணங்கவலயங்களும்"

"ஓமராமையொருங்குமுணர்வோர்"

"புருவத் - தேளிரண்டுநெரிய"

"நாகமதுநாகமூறநாகமெனநின்றுண்"

"வெம்பராகுத்தனிவிளிந்த"

"செம்புகாட்டியகண்ணிணைபாலெனை"
"அன்னைதன்கன்னிக்கன்றி
"இங்கிவன்மருகனுகவெத்தவமுடையாள்"
"பனையாதிவிருப்பதிவுதொழிலாகி"
"இலனென்னுமெவ்வமுமையாமையீதல்"
"தவ்வையைக்காட்டிவிடும்"

(b) "அன்னை - - - - - யாள்" என்பதைத் தனிவசனங்களாகப் பகுக்க.

(c) "இலனை - - - - - யீதல்" என்பதன் நான்கு அர்த்தமும் எழுதுக.

(d) தவ்வையைக்காட்டிவிடும் என்பது என்னமயக்கம்? மேற்கோள் காட்டுக.

VII. (a) i. "அருளல்ல தியாதெனிற் கொல்லாமை கோறல்" என்ன பொருள்கோள்? ii. அதற்கு நன்னூற் சூத்திரம் யாது?

(b) "இலர்பல ராகிய காரண நோற்பார் - சிலர்"
i. இலர் யாரைக்குறித்தது?
ii. ஏன் அவ்வாறு பொருள்பட்டது?
iii. மேற்கோள் காட்டுக.

(c) "பெற்றம் - புலியின்றோல்போர்த்துமேய்ந்தற்று" இஃது என்ன அலங்காரம்?

VIII. கம்பர் கவியோடு கோதாவிரியையும் பரஞ்சோதி முனிவர் படையைக் கடலினூடும் உருவகப்படுத்திய செய்யுட்களை எழுதுக. பாட்டு ஞாபகமில்லையாயின் அவ்வர்ணனைகளைப் பூரணமாக எழுதுக.

IX. அல்விகுதி வியங்கோளில் ரூபவிகற்பமின்றி உடம்பாடாகவும் எதிர்மறையாகவும் வருதற்கு உதாரணமாக ஒரு குறள் காட்டுக.

X. நமக்குத் தீமைசெய்தார்க்கு நாம் எப்படி ஒழுகல் வேண்டும்? இதற்கு விடை குறளிலிருந்து எடுத்தெழுதுக.

XI. (*a*) "பயன்மர முள்ளூர்ப் பழுத்தற்றூற் செல்வ
நயனுடை யான்கட் படின்"
இதில் முதலடியிலுள்ள சந்திகளுக்குப் புணர்ச்சி கூறுக.

(*b*) "பொன்னிகாவலன்" இயல்பாதற்கு விதியாது? அதற்கு வேறுதாரணம் இரண்டு காட்டுக.

(*c*) இரண்டு காலங்காட்டும் விகுதிக்குச் சில உதாரணம் எழுதுக.

XII. பஞ்சவடிதிரத்தின் சிறப்பையாவது, விராதன் கூறிய ஸ்ரீராமஸ்துதியையாவது விரிவாயெழுதுக.

WEDNESDAY, 20TH JANUARY, 12 NOON TO 2 P.M.

TAMIL: TRANSLATION.

I. Translate into Tamil:

(*a*) India will, on a comparison of her raw products with those of other nations, be found to exhibit only a second-rate quality in many of those articles, for the production of which she has long been famed. For instance, her raw silks are not equal in excellence to those of China or Italy. Her produce of sugar-cane is inferior in richness to that of Jamaica; her spices have loss pungency than those of Ceylon, the West Indies, or the Islands of the Eastern Archipelago. Her cotton is far surpassed by that of South America. Though some kinds of her rice, grown in limited quantities, are of unsurpassed fineness, still the quality of her abundant sorts is excelled by that of the Carolina rice. Her maize is below the standard of Southern Europe; her wheat, though beginning to be esteemed and exported, cannot rival in quality the wheat of Great Britain or of the United States. Her indigenous vegetables and fruit cannot be compared with those of European countries.

(b) Character is made up of small duties faithfully performed,—of self-denials, of self-sacrifices, of kindly acts of love and duty. The backbone of character is laid at home; and whether the constitutional tendencies be good or bad, home influences will, as a rule, fan them into activity. "He that is faithful in little is faithful in much; but he that is unfaithful in little is unfaithful also in much." Kindness begets kindness, and truth and trust will bear a rich harvest of truth and trust.

(c) (1) I regret he did this. It is just like him.

(2) It was no less a person than the Governor

(3) Your hesitation is as injurious to the progress of this affair as their rashness.

(4) Take him for all in all, I shall not look upon his like again.

II. Translate into English;

(1) (a) ஆற்றுவா ராற்றல் பசியாற்ற லப்பசியை
மாற்றுவா ராறறலிற் பின்.

(b) பற்றற்றே மென்பார் படிற்றொழுக்க மெற்
றெற்றென் றேதம் பலவுந் தரும்.

(c) யாமெய்யாக் கண்டவற்று ளில்லே யெனினத்
தொன்றும் வாய்மையி னல்ல பிற.

(2) (a) கடுத்த கராங்கதுவ நிமிர்கை யெடுத்து மெப
கலங்கி
உடுத்த திசையனைத்தினுஞ் சென்றெலி
கொள்ள வுறுதுயராற்
அடுத்த பெருந் தனிமூலத்தரும் பரமே
பரமே என
றெடுத்தொரு வாரணம் அழைக்க நீயே
னன்றே னென்றாய்.

(b) உய்விடத்து தவற்குரி யானுந்தன்
மெய்விடக் கருதாது விண்ணேறினன்.

இவ்விடத்தினி லெம்பருமா னெமைக்
கய்விடிற் பிணையார்களோ கண்ணுளார்.

(3) பூந்தேனெழுகிப்புதுமணங்கமழ, வண்டினமொய்த்துமகிழ்ந்திசைபாட, நாண்மலர்பூப்ப, தென்றல்வீசுஞ் செழும்பூஞ்சோலையிருக்க, அதன்கட் சேர்ந்து தாபத்தை நீக்கிக்கொள்ள நினையாமல், உள்ளடி செவக்க வெள்ளிடை வெயிலில் விதிர்விதிர்த்துடலம் வியர்த்து வெதும்ப ஓயாது நடந்து நாய்போல் அலையவேண்டியதென்ன ?

(4) தத்தம் வருணத்திற்கும் நிலைமைக்குமுரிய வொழுக்கங்களினின்று வழுவாதொழுக அறம் வளரும்; அறம் வளரப் பாவந் தேயும்; பாவந் தேய அறியாமை நீங்கும்; அறியாமைநீங்க நித்த அநித்தங்களது வேறுபாட்டினர்வும் ஆதி தன் மாலையவாய இம்மை மறுமையின்பங்களின் உவர்ப்பும் பிறவி துன்பங்களுந் தோன்றும்; அவைதோன்ற வீட்டின்கண் ஆசையுண்டாம்; அஃதுண்டாக வீட்டிற்குக் காரணமாகிய யோகமூயற்சி யுண்டாம்; அஃதுண்டாக மெய்யுணர்வு பிறந்து புறப்பற்றுகிய எனதென்பதும் அகப்பற்றுகிய யானென்பதும் விடும்.

(5) காரணத்திலிருந்து காரியம் தோன்றுவதல்லது நிஷ்காரணமாய்த் தோன்றுமைபால், அஃதத்தம் சுபாவமென்கிறது சரியன்று. சூத்திரியில்லாமல் பிரதிமை யாடுகின்றதா ? "வித்தில்லாத சம்பிரதாயம் மேலு மில்லை கீழுமில்லை" என்றும், சித்தில்லாதபோது வேறு சிவனில்லை இல்லையே என்றுஞ் சொல்லுகின்றார்களே. ஆதலால் சராசரம் தெய்வச்செயலென்பதே அனுமானப் பிரமாணத்தால் விசதமாம்.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 12 NOON.

TELUGU: TEXT-BOOKS AND GRAMMAR.

I. (a) శ్లేష కవిత్వమెట్టిది? అందుఁ బ్రాయికముగాఁ గన్పట్టు దోషములెవ్వి?

వసుచరిత్రమునందట్టి దోషములు గోచరించినయెడల వానిని సోదాహరణంబుగ సూచింపుడు.

(b) పదసంధి విశేషమువలనను, పదముల యర్థాంతర సామర్థ్యముచేతను, కొన్ని వర్ణములకుఁగల యభేదమువలనను అర్థభేదము కలుగుట కుదాహరణంబుల నిచ్చునది.

(c) సుప్రసిద్ధములగు పురాణేతిహాసంబులయందలి వసురాజు వృత్తాంతమును సంక్షేపించి వ్రాయుము.

II. (a) "చిరనముపాత్రితాగ్నితడిఁ జెందినశించునటంచునో కృతా

"ధ్వరతఁదదగ్ని మైనునికి దానినొకంగము దాచుచేతనో

"పురధరణీసురుల్నిగమ భూధరముల్జపయజ్ఞశీలురా

"హరిధనదేశులైనవలహస్తముసాపరువారిధారకున్.

(b) "నానాసూనవితాన వాసనల నానందించుసారంగమే

"లానన్నొల్లదటంచుగంధఫలి బల్కాకందపంబందియో

"పానాసాకృతిఁబూనిసర్వ సుమనస్సారభ్య సంవాసమై

"పూనెంశ్రేష్ఠమాలికా మధుకరీవృందంబు నిర్వంకలన్.

(c) "కలడుల్లొక మహోమహోగ్రహుత భుగ్జ్వాలా
వళీనిర్జల
"స్థలదంభోనిధిలక్ష్యహైమవత పక్షక్షోదదక్షోరుది
"గ్వలభీదుర్భరభేరికాభయదభాంకారైకసంప్రీణితా
"చలవైరిస్తుత కీర్తిసాంద్రుడు వసుక్ష్మాపాలచంద్రుం
డిలన్॥

(d) "జగదుద్గతికినిబీజము ప్రధానమననీక్షత్యాది వీశున
శబ్దవాదిఁ
"బొరినీశుడేనన భోగమాత్రేత్యాద్యుదాహృతిస్ఫూ
ర్తిమాయానివాది
"ఫలియించుఁగ్రియయనా ఫలమతయిత్యాది సర్వే
శుఁగొననియపూర్వవాది
"శాస్త్రయోనిత్వాదిసరణినీశ్వరునిదెల్పెడు ననుమా
నమన్పీలువాది
"నిత్యులందెల్ల నిత్యుడన్శ్రుత్యురూక్తి
"క్షణికసర్వజ్ఞ తెశసౌగతవివాది
"ననుపపత్తేర్న యనుసూత్రమాదియైన
"వానినృపతీశు ప్రత్యక్షవాదిగెలిచె॥

పై పద్యములకు విపులముగ నర్థము వ్రాసి మొదటి
రెండు పద్యములయందలి యలంకారములను లక్ష
ణయుక్తములుగఁ దెలుపుడు.

(a) భూధరము ; జపయజ్ఞము-ఈ పదములు ప్రయోగిం
చినందువలన స్ఫురించెడి కవి యభిప్రాయమేమి ?
దాచుచేతనో-ఇందలి పదములకు వ్యాకరణ సూత్రా
మసరణముగ రూప నిష్పత్తిఁజేయునది.

(b) ఈ పద్యము వృత్తాంతమెట్టిది.
బల్కాక - ఈ రూప మెట్లుసిద్ధించినది.

(c) ఇందలి సమాసముల నిరూపించి "క్ష్మాపాల చంద్రుండ నుచో" దోషమేమైనఁ గనుపడిన సహేతుకము గ స్పష్టీకరించునది.

(d) ఇందుదాహృతములైన సంస్కృతవాక్యములెచ్చటివి? ఈ చెప్పఁబడిన మతముల కాచార్యులెవ్వరు?

III. (a) సజ్జికపు; బ్రోదిమై; పణకులు; గుమురు; ఈరికలు; కొణిగెలు; వేనలి; మిగురాకు; ఘర్మధేనువు; ఖరూరిక - ఈ పదముల కర్థమేమి?

(b) భావనాత్రయ స్వరూపమెట్టిది?

IV. "కప్యాసం పుండరీకే ఇవ అక్షిణీ"
"అపహత పాప్మాదివ్యోదేవః"
"సూర్యోహం; మనురహం"
ఈ వాక్యము లేప్రకరణముల నుదాహృతములైనవి?
ఇవి విష్ణుచిత్తుని వాదమునకెట్లుపయుక్తములగుచున్నవి?

V. పురంజయుఁడు; అనరణ్యుఁడు; పురుకుత్సుఁడు; లవణాసురుఁడు; ఔర్వుఁడు;
వీరి చరిత్రములు సంక్షేపముగా వ్రాయుఁడు.

VI. రసము లెన్నివిధములు? అద్భుతరసమును వ్యక్తపరచు పద్యమొకటివ్రాయుఁడు: ఆనంద మొకరసముగా గ్రహింపకుండుటకుఁ గారణమేమి?

VII. లయగ్రాహి; పంచచామరము; కందము - వీని గణనిర్ణయమును యతిస్థానములును దెలియఁజేసి పంచచామరమునకొక యుదాహరణమిండు.

VIII. "నేరకేటియసల్ దెచ్చి నీరజాప్త
"సానఁబట్టినరావొడి చల్లిమెదిచి
"చదునుసుధనిడిచేసెనో పద్మభవుడు
"వీనిగాకున్నఁగలదె యీ మేనికాంతి!"

ఇందువలన స్మరణకువచ్చుచున్న వసుచరిత్రమునందలి పద్య
మునుగాని తదర్థమునుగాని వ్రాయుఁడు.

WEDNESDAY, 20TH JANUARY, 12 NOON TO 2 P.M.

TELUGU: TRANSLATION.

I. Translate into Telugu:

(*a*) India will, on a comparison of her raw products with those of other nations, be found to exhibit only a second-rate quality in many of those articles, for the production of which she has long been famed. For instance, her raw silks are not equal in excellence to those of China or Italy. Her produce of sugar-cane is inferior in richness to that of Jamaica; her spices have less pungency than those of Ceylon, the West Indies, or the Islands of the Eastern Archipelago. Her cotton is far surpassed by that of South America. Though some kinds of her rice, grown in limited quantities, are of unsurpassed fineness, still the quality of her abundant sorts is excelled by that of the Carolina rice. Her maize is below the standard of Southern Europe; her wheat, though beginning to be esteemed and exported, cannot rival in quality the wheat of Great Britain or of the United States. Her indigenous vegetables and fruit cannot be compared with those of European countries.

(*b*) Character is made up of small duties faithfully performed,—of self-denials, of self-sacrifices, of kindly acts of love and duty. The backbone of character is laid at home; and whether the constitutional

tendencies be good or bad, home influences will, as a rule, fan them into activity. "He that is faithful in little is faithful in much; but he that is unfaithful in little is unfaithful also in much." Kindness begets kindness, and truth and trust will bear a rich harvest of truth and trust.

(c) (1) I regret he did this. It is just like him.

(2) It was no less a person than the Governor.

(3) Your hesitation is as injurious to the progress of this affair as their rashness.

(4) Take him for all in all, I shall not look upon his like again.

II. Translate into English:

(1) "బుద్ధీంద్రియక్షోభములకుఁ బెట్టనికోట విపదంబు రాశిదుర్వికృతికోడ

"ఖలదురాలాపమార్గణవజ్రకవచంబు రణమహీస్థలికి శ్రీరామరక్ష

"శాత్రవదుర్గర్వ సంస్తంభనౌషధి మొనయుచిల తాశ్రేణి మూఁకవిప్పు

"యోగాదిసంసిద్ధు లొనగూర్చు పెన్నిధి తూలునే కాకుల తోడునీడ

"సకలసుగుణప్రధానంబు సకలకార్య

"జాలసాఫల్య కరణైకసాధనంబు

"ధైర్యగుణమట్టి ధైర్యంబుదక్కిపోరఁ

"దత్తఱింతురె యకట మీతరమువారు.

(2) "వినియెనెలల్చతుర్ద్వయిని వృష్టిదినాలికి రాత్రి కైదివం

"బునజరకైవయస్సునను బూనిపరంబున కిప్పు
డుద్యమం
"బనువుగఁ జేయఁగావలయునంచుఁ బురోహిత
ధర్మమాత్మగీ
"ల్కొననలవిప్రుడాద్విజులలోన సుభాషితము
న్బఠింపగన్॥

(3) "ఉన్నట్లయుండఁగాదరి కిన్నరులను నావచేర్చు
క్రియవెసదాబో
"కున్నట్లయుండికాలంబున్నరులకు వయసుఁబు
చ్చి మోసముఁదెచ్చున్॥

(4) "సారహీనములగు సంసారసుఖములు విడిచియే
కాకియైయడవికరిగి
"తాపససాక్యామృతములువీనులుగ్రోలఁ జెలిమి
వేర్పాటను చిరమరలకుఁ
"జొరకనింతాస్తుతుల్సరిగాఁగొనుచుఁగత్తి నొకఁ
డువేసిననువె ఱొక్కరుండు
"చందనమలఁదిన డెందమయ్యిరువుర యడసమం
బుగఁదూగజడుడనంగ
"మెలఁగితగువేళఁ బర్ణశాలలకునరిగి
"యెత్తుతూబిక్ష యెవ్వారలేమియేని
"నిడినఁగైకొని నాలుగేనెడలమాత్ర
"గన్నదానఁదృప్తుండ నైయున్నమేలు॥

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 12 NOON.

KANARESE: TEXT-BOOKS AND GRAMMAR.

I. ಕಲಾವತೀ ಪರಿಣಯದಲ್ಲಿ ಕಾವ್ಯನಾಯಕನ್ಯಾರೆಂಬದನ್ನು (hero) ನಿರ್ಧರಿಸಿ ಕರ್ನಾಟಕ ಸಾಹಿತ್ಯಲಕ್ಷಣಪ್ರಕಾರ ನಾಯಕಸ್ವರೂಪಗಳು ಆತನಲ್ಲಿ ಇರುವವೊ ಎಂಬದನ್ನು ಚರ್ಚಿಸುವದು. ಹೊಣಕಾವ್ಯ ವಿಧಿಗಳಪ್ರಕಾರವಾಗಲಿ ನಿಮ್ಮಸ್ವಂತ ಬುದ್ಧಿಗೆ ತೋಚುವ ಪ್ರಕಾರವಾಗಲಿ ಕಲಾವತಿ ಪರಿಣಯ ಕಾವ್ಯದಲ್ಲಿ ಮುಖ್ಯ ಎರಡು ದೋಷಗಳನ್ನು ತೋರಿಸಿಕೊಡುವದು.

II. ಕೆಳಗೆ ಕಾಣಿಸಿದವುಗಳ ಅರ್ಥ ವಿವರಿಸುವದು :

(a) ಸಮಯೋಚಿತಮಾನ ಜನಿತ । ಭೈಮಿಯಿಂಕಾರಣಕಥಾಳಯಂ ಕಲ್ಪಿಸುತ । ಕ್ರಮಮನೊರೆಯುದಿರು.

(b) ರಾಜದ್ವೇಷಮಧುವಸ । ಮಾಜಾತಪ್ರೀತಿತನ್ನ ಸಂಗದಿಗುಣಿನೀ। ರೇಜಕ್ಕೊಳವೆನಿಸಿದಲ। ಹ್ಮೀಜಾಯೆಗೆಕೂರ್ತವಂಗೆಮತಿಸಮನಿಪುದೇ.

(c) ಪಿರಿದುಸಿರಿಯಿರೆಯುಮವನೀ । ಶ್ವರತನಯೆಂವಿಮಳಗುಣಮನೊಳಕೊಂಡಿಸೆದಂ । ಸರಸಿಜಮಿನೆವಿತ್ರರುಚಿಸ್ಫುರಿತಾವೋದಾವಹಂಸದಾಳನಿಷೇವ್ಯಂ.

(d) ಅಯ್ಯಾ ! ತನ್ನುಕ್ತಿ ವಸ್ತುಂಸ್ವರೂಪ ನಿರೂಪಣಮಾತ್ರ ಪರ್ಯವಸಾಯೆಮಲ್ಲದೆ ವಸುಮತೀಶನಾಶಯೆಕೆ ಪ್ರತಿಕೂಲವಾಗಿ ಪ್ರವರ್ತಿಸುವದಾಗಿ ತಿಳಯೆಲಾಗದು.

(e) ನಿಮ್ಮಿಂದ ಸಾಧುಚಿಂತಿತಮಾದುದಂ ಮಕರಾಕ್ಷೆರಂಗೀಕರಿಸುತುದ್ಯುಕ್ತಕಾರ್ಯೆಮಂನಿಮ್ಮುಕ್ತಕಾರಿಗಳು ವಾಹನವ ಮಾಡಿರುವರು.

III. (a) " (ಯುಗಂಧರ) ಮಂತ್ರಿ ಕರಗಳಮುಗಿದು - ಜೀಯ್ಯಾ, ಭೂವಲ್ಲಭನ ಹರ್ಷ ಮೆಂತಾಗುವದೊ ಅದ

ತಿಳಯಲೋಸುಗವೆ ಚರಣಸರಸಿಜದೆಡೆಗೆ ನಡಿತಂದೆನೆ
ನಲು ; ಸಾವೀರವಲ್ಲಭನು ಕಪಥವಂಮಾಡಿರುವ ಕತ
ಪತ್ರದಳವಿಲೋಚನೆಯಿಂದ ತಿಳಯಬೇಕೆಂದು ವಾಚಿ
ಸಲು ; ಮಂತ್ರಿಯೊಾನುಡಿಗೇಳ - ಜೀಯ್ಯಾ, ದೇವಿ
ಯೆರಂದು ಗಗನದಲ್ಲಿ ಚಿತ್ರಮಂಬರೆಯೆ ಕಾರಣವೇನೆ
ನಲು ; ಮಕರಂದ ನಗುತ - ದುಷ್ಯಂತರಾಯೆ ನೊಡನೆ
ಆಶ್ರಮದಿ ಸಂತಸದಿ ಬೆರೆದಾಶಕುಂತಳೆಯು ಲೋಕ
ದೊಳು ದೂಷಣೆಯೆನೇನೈದಿದಳು ಪೇಳನಲು ; ಮಂ
ತ್ರಿವರಮಕರಂದನೊಡನೆ - ರಕ್ಕಸಿಯೆನ್ನು ಕೊಂದೆ ನ
ರವರನದನುಬಲ್ಲ, ನಿನಗೆಂತದುವೆ ವಿದಿತಮಾಗುವದು ? ”

ಈ ಸಂಭಾಷಣೆಯೆಲ್ಲಿರುವ ಗೂಢಾರ್ಥ ಸ್ಪಷ್ಟವಾಗಿತಿಳ
ಯುವಂತೆ ಸಾಧಾರಣಮಾತುಗಳಿಂದ ಬರಿಯುವದು.
(ಕಥಾಸಂದರ್ಭಗಳನ್ನು ಸವಿಸ್ತಾರವಾಗಿ ವಿವರಿಸುವದು
ಅವಶ್ಯವಿಲ್ಲ).

(b) ಸುಮತಿಯು ವಿಜಯವರ್ಮನಿಗೆ ಹೇಳದ ನೀತಿಯೆಪ್ರ
ಕಾರ ಸಾಮ, ದಾನ, ಭೇದ, ದಂಡವೆಂಬ ನಾಲ್ಕುಪಾಯೆ
ಗಳನ್ನು ಎಲ್ಲೆಲ್ಲಿ ಉಪಯೋಗಿಸಬೇಕು ? ಒಂದೊಂದ
ನ್ನು ಆಚರಿಸುವ ರಾಜನಲ್ಲಿ ಎಂಥಾಗುಣಗಳಿರಬೇ
ಕೆಂಬದನ್ನು ನಾಲ್ಕುವಾಕ್ಯಗಳೊಳಗೆ ಹೇಳುವದು. ಇ
ವುಗಳಲ್ಲಿ ಮೂರನೇ ಯುಪಾಯವೇ ಪ್ರಕಸ್ತವೆಂಬದ
ನ್ನು ತಿಳಸುವಬಗ್ಯೆ ಸುಮತಿಯು ಕೊಟ್ಟ ಎರಡು ನಿದ
ರ್ಶನಗಳ್ಯಾವವು ?

IV. (a) ಮದವದ್ಭದ್ರಗಜೇಂದ್ರಮಂ ಸುರಸರಿತ್ಸಂಜಾತಕಂಜಾತ
ಮಂ
ಸದಲಂಕಾರವ್ಯಭೇಂದ್ರನಂವಿತತರೋಚಿರ್ಗಾತ್ರನಂಮಿತ್ರ
ನಂ

ಬಿದುಗೆಲ್ಗನ್ನಡಿಯೆಂ ಸುಧಾಬ್ಧಿಯೆನಮರ್ತ್ಯ ಧಾರಮಂ ಪೊರುವಂ

ಮುದದಿಂ ಸ್ವಪ್ನದಿಕಂಡಳಾವಧುಕಳಾಶ್ರೀ ಸಾಂದ್ರನಂ ಚಂದ್ರನಂ॥

ಈ ಸ್ವಪ್ನದ ಫಲವೇನು? ಫಲವಿಂಧಾದ್ದೇ ಎಂದು ಅರಸನು ಹ್ಯಾಗೆ ನಿರ್ಧಾರಮಾಡಿದನು?

(b) 1. 'ಹರನಾತ್ಮಲೀಲೆಯಿಂದಂ ಕಿರಾತ ನೆನಿಸಿರ್ದನಂದು ಸಾರ್ಥಹಿತಾರ್ಥಂ'.

2. 'ಅನುಜಗುರು ವಿನಯವಚನಮನನಾದರಂಗೈದು ಕೆಡರೇಮುನ್ನೀಧರೆಯೋಳ್'.

3. 'ಅಧ್ವರಮರ್ದನಕ್ಕೆ ತಳರ್ವವೀರಭದ್ರನಂತೆ'.

ಇವುಗಳಲ್ಲಿ ಸೂಚಿಸಲ್ಪಟ್ಟ ಕಥೆ ಯಾವದು?

(c) ವಿಜಯವರ್ಮ, ಪರಂತಪ, ದರಿವಕ್ತ್ರ, ಇವರಲ್ಲಿ ಒಬ್ಬೊಬ್ಬರಿಗೆ ಸಾವ್ವೀರಪತಿಯೊಡನೆ ಯುದ್ಧಮಾಡಹೋಗಲಿಕ್ಕಿರುವ ಕಾರಣಗಳ್ಯಾವವು (motives).

V. (a) ಅವನೆಕುಲರಹಿತನುಂ । ಮೀಣವನೆಕುಲಾನ್ವಿತನುಮವನೆ ತದುಭಯಭಾವಂ । ಸಮನಿಸದ ಸರ್ವಗತನುಂ.

ಇದರಲ್ಲಿ ತೋರ್ಪಡುವ ವಿರೋಧೋಕ್ತಿಗಳನ್ನು ವಿವರಿಸು (reconcile the apparent contradictions).

(b) ಕೆಳಗಿನವಾಕ್ಯಗಳ ಅರ್ಥವೇನು? ಆವುಗಳು ಯಾವಸಂದರ್ಭದಲ್ಲಿ ಬಂದಿವೆ?

1 ವಿತ್ತಪಂಗೆ ಪೊನ್ನಿರೆಯೆನಹೀಶ್ವರಂಗೆ ಪೊಸಟಿಕ್ಕೆಯೆನೀವವೋಲ್.

2 ಭೃತ್ಯಾಪರಾಧಾತ್ಸ್ವಾಮಿನೊದಂಡಃ.

3. ವಿಷ್ಕರಕೆಪಾಶುಪತಾಸ್ತ್ರಮದ್ಯಾಕೆ ?

(c) ಭೆಕ್ತಿಲಕ್ಷಣಗಳ್ಯಾವವು ? ರಾಜವಿದ್ಯೆಯೆಲ್ಲಿ ಏನೇನು ಶೇರುತ್ತೆ ?

VI. (a) 1. ನನೆಕೊನೆವೋಗು, 2. ಮೊಡವಿ, 3. ಬಳ್ಳವರಿವ, 4. ಪಳಂಚುಳಿಯು, 5. ಕುಂಬಿಡು, 6. ಗರ್ಪಣ, 7. ಅಣಕ, 8. ನಭಃಪಯೋಜಪಾಯಿಂ, 9. ಲವಣೊನವ್ಯಂಜನಪಾಯಿಂ, 10. ಗೃಧ್ರವ್ಯೂಹ. ಇವುಗಳ ಅರ್ಥವೇನು ?

(b) ಏಪೊಳ್ತುಂ, ಅಲ್ಲಿಂಬಳಿಯಿಂ, ಇರೆಯುಂ, ಮಾಳ್ಕೆ. ಇವುಗಳ ಹೊಸಕನ್ನಡರೂಪ ಯಾವದು ?

(c) ಪಜ್ಜಳಿ, ಗಾವಿಲ, ಮಂತ್ರಣ, ಅಚ್ಚಿಗ, ಜಾಗಿ. ಇವುಗಳ ತತ್ಸಮರೂಪವನ್ನು ಬರಿಯುವದು.

VII. (a) ರಥೋದ್ಧತ, ಲಯಗ್ರಾಹಿ, ಶಿಖರಿಣೀ. ಈ ವೃತ್ತಗಳ ಲಕ್ಷಣಗಳ್ಯಾವವು ? IV. (a) ಯೆಲ್ಲಿನಪದ್ಯವುಯಾವವೃತ್ತದಲ್ಲಿದೆ ?

(b) ಪದಸಮಬಿಡಾರವೆಂದರೇನು ? ಅದು ಎಷ್ಟುವಿಧ ? ಒಂದೊಂದಕ್ಕೆ ಒಂದೊಂದು ಉದಾಹರಣೆಯನ್ನು ಕೊಡುವದು.

(c) ಮಾಡುಗುಂ. ಎಂಬ ರೂಪವನ್ನು ಹಳೆಗನ್ನಡದಲ್ಲಿ [illegible]ಯಾವ ಯಾವ ವಚನ, ಕಾಲ, ಪುರುಷಗಳಲ್ಲಿ ಉಪಯೋಗಿಸುತ್ತಾರೆ ? ಒಂದೊಂದು ಉದಾಹರಣೆ ಕೊಡಮದು.

WEDNESDAY, 20TH JANUARY, 12 NOON TO 2 P.M.

KANARESE: TRANSLATION.

I. Translate into Kanarese:

(*a*) India will, on a comparison of her raw products with those of other nations, be found to exhibit only a second-rate quality in many of those articles, for the production of which she has long been famed. For instance, her raw silks are not equal in excellence to those of China or Italy. Her produce of sugar-cane is inferior in richness to that of Jamaica; her spices have less pungency than those of Ceylon, the West Indies, or the Islands of the eastern Archipelago. Her cotton is far surpassed by that of South America Though some kinds of her rice, grown in limited quantities, are of unsurpassed fineness, still the quality of her abundant sorts is excelled by that of the Carolina rice. Her maize is below the standard of Southern Europe; her wheat, though beginning to be esteemed and exported, cannot rival in quality the wheat of Great Britain or of the United States. Her indigenous vegetables and fruit cannot be compared with those of European countries.

(*b*) Character is made up of small duties faithfully performed,—of self-denials, of self-sacrifices, of kindly acts of love and duty. The backbone of character is laid at home; and whether the constitutional tendencies be good or bad, home influences will, as a rule, fan them into activity. "He that is faithful in little is faithful in much; but he that is unfaithful in little is unfaithful also in much." Kindness begets kindness, and truth and trust will bear a rich harvest of truth and trust.

(*c*) (1) I regret he did this. It is just like him.

(2) It was no less a person than the Governor.

(3) Your hesitation is as injurious to the progress of this affair as their rashness.

(4) Take him for all in all, I shall not look upon his like again.

II. Translate into English :

1. ಸಿರಿಯೋಳ್ ಶ್ರೀಕಾಂತನೆಂತಂತತುಳಕಳೆಗಳೊಳ್ಕಂಜಸಂ
ಜಾತನೆಂತಂ
ತರಿವರ್ಗಧ್ವಂಸದೋಳ್ಧೂರ್ಜಟಿಯತನುಜನೆಂತಂತೆಗಾಂ
ಭೀರ್ಯದೊಳ್ಭಾ
ಸುರಪಾರಾವಾರಮೆಂತಂ ತಧಿಕವಿಭವದೋಳ್ಶಕ್ರನೆಂತಂತೆ
ದಾನೋ
ತ್ಕರದೋಳ್ಮಂದಾರಮೆಂತಂತೆಸೆದನಭಿನವಂ ಭಾರತೀಭಾಗ
ಧೇಯಂ॥

2. ನೆರೆಯೋಳ್ನೈದಿಲೆನಾಣ್ಚಿಪಂತೆನಗೆತಾರಾ ನಾರಿಯನ್ನೋ
ಡೆಬಂ
ದಿರುಳೆನ್ನಂಕರದಿಂದೆ ಮುಟ್ಟಿದನಿವಂ ದೋಷಾಕರಂವಕ್ತ್ರ
ಮಂ
ಭರದಿಂಮುಚ್ಚಿದೆನೆಂದಿನಂಗಳನಿನಾದವ್ಯಾಜದಿಂಪೇಳೆತಾ
ವರೆಪಾದಾಗ್ರದೆನೂಂಕಿದಂ ಮುಳಿದವಂ ವಾರಾಶಿಯೋಳ್ಚಂ
ದ್ರನಂ॥

3. ಪೊಡಕರಿಸಿಮೊಳೆತುದೆದೆನೆಲ
ದೆಡೆಯೋಳ್ಕಡೆಗಂಣೊಳುರೆತಳರ್ತುದುಕೊಂಕಿಂ
ಕುಡಿಗೊಂಡುದುಪುರ್ಬಿನೊಳಲ
ರ್ವಡೆದುದುವದನದೊಳೆಕೋಪಲತೆಭೂಭುಜನಾ॥

4. ಹೃದಯಾಲವಾಲದೋಳ್ಪು
ಟ್ಟಿದವಿಮಲಜ್ಞಾನಲತೆಗೆಶಮಜಳಮಂಸೂ
ಸದೆಕೋಪಶಿಖಿಯನುರಿಪಿದೊ
ಡದುಸುಖರಸಮೋಕ್ಷಫಲಮನೇನಿತ್ತವುದೇ॥

5. ಇತ್ತಕಾಶ್ಮೀರಪತಿ ನಿರಾತಂಕದಿಂ ತೆರಳಿ ನಡೆತರುತ್ತಮಾರ್ಗ
ದೊಳ್ಳಾಮಭಾಗದಲ್ಲಿ ಗಗನಮಂಮುಸುಕು ತ್ತಿರುವ ಧರಣಿಯಿಂದೆದ್ದ ರ
ಜೋರಾಜಿಯೆಂಕಂಡು ಕಂಕಾಯು ಕ್ತನಾಗಿ ಚಕ್ರಾಕಾರಮಾಗಿ ಸುಳಿಯು
ತ್ತಿರುವ ಪ್ರಚಂಡಪ್ರಭಂಜನನಿಂ ಸಮುತ್ಪನ್ನಮಾದುದೋ ಅಥವಾ ಕಲ
ಹೋದ್ಯುಕ್ತ ಮಾದರಣ್ಯಯೂಥಪಗಳ ಪ್ರಹಾರದಿಂದುದಿಸಿರುವುದೋ
ಅದಲ್ಲದೆಯು, ಕುವಲಯಾಪೀಡನು ನಿಜಾಗಮನಮನ್ನರಿದು ಸೇನೆಯಿಂ
ದೊಡಗೂಡಿ ನಡೆತರುವನೋಯೆಂದು ಯೋಚಿಸುತ್ತ ಕಂಡನಾಕಡೆ ಕಾ
ಲದರ್ಣವದ ತೆರೆಗಳಂತೆ ನಾಸೀರದೋಳ್ಬರುವ ತೇಜಿಗಳ್ರಾಜಿಯೆಂಬಂ
ದ ನಿರಾವತೀಪತಿಯೆಂದು ನಿಶ್ಚೆಯೆಗೈದು ಅದ್ಯಪ್ಪಪೂರ್ವವಾಗಿರುವ ಪೃ
ತನೆಯೊಳ್ಗೆಟಿಯೆಂನೋಡಿ ವಿಸ್ಮಿತನಾಗುತ್ತಲೀ ರೌದ್ರವೀ ಧೈರ್ಯವೀ ಸ
ಮುತ್ಸಾಹಗಳುವಲಯಾಪೀಡನಹ್ಲೋಹಿಣಿಗಲ್ಲದೆಲ್ಲಿರವದೆಂದು ಯೋಚಿ
ಸುತ್ತಿರಲು, ಮುಂಗಾರುಮಳೆಯು ಜಗತ್ಪ್ರಾಣ ಪ್ರಜೋದಿತಮಾಗಿ ನಿಮಿ
ಷಮಾತ್ರದೊಳೊದಗಿ ಆವರಿಸುವಂತೆ ವಿದ್ವಿಷನಂಕಂಡು ಸಂಗರೋತ್ಸಾ
ಹದಿಂ ಮೈಯೆರ್ಚಿ ಧನಂಜಯನಿಂಪೈರಿಶಾ ಹ್ಲೋಹಿಣಿಯು ಕಸ್ತ್ರಾಸ್ತ್ರ
ಗಳ ಸುರಿಯು ತ್ತೊದಗು ವನಿತರೋಳ್ನಿರಾತಂಕದಿಂ ಬರುತಿದ್ದ ವಿಜಯವ
ರ್ಮನ ಹ್ಲೋಹಿಣಿಯು ಕದಡಿಸಂಭ್ರಾಂತನಾಗಲಾಕಾಲಂ ಜರೀಕನಿವನಾ
ವಮಹೀಕನೋ ಎಂದು ಯೋಚಿಸುತಿದ್ದನು.

6. ಗುರುವಿಲ್ಲದತಪಮುರ್ವೀ
ಶ್ವರನಿಲ್ಲದದೇಶಮಮೃತಕರನಿಲ್ಲದಶಾ
ರ್ವರಿಬೆಳಸಿಲ್ಲದಪೊಲಮದ
ಕರಿಯಿಲ್ಲದಸೇನೆಯೊಪ್ಪಲಾರ್ಕುಮಿಜಗದೊಳ್ ॥

7. ಕೆತ್ತಬಲ್ಲತ್ತಲೆಗೆತರಣಿಮುಂಗಾಣದಿರೆ
ಪೊತ್ತುವೆಳಗಂಬೇರೆತೋರ್ಪರಾರ್ಜಡದೆಪು
ರ್ವೋತ್ತರಕೆಮಾರುತಂಪೆಮರ್ದೊಡಾರ್ಜೀ ಸುವರ್ಜಳಕಾ
ಲವಟ್ಟದಿಂಗ.

ಕೃತ್ತಿಮದವಿಷದಸೊಂಕೆಗೆಗರುಡನೆಳವಳೆಯೆ
ಮೆತ್ತೆರಕ್ಷೆಗೆಮಂತ್ರಿಸುವರಾರುಳೊಮಿಪನೀ
ನೊತ್ತುವನುತಾಪಕೆಡೆಗೊಟ್ಟ ರಾರ್ಜಿಸುವರ್ಕೀಳೆಂದನಾ
ಮುನಿಪನು.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 12 NOON.

MALAYALAM: TEXT-BOOKS AND GRAMMAR.

I. (*a*) കീചകന്റെ ശവത്തോടുകൂടി പാഞ്ചാലി യെകെട്ടി ദഹിപ്പിപ്പാൻ ഭാവിച്ചുസമ യം ഭീമസേനൻ എന്തസംഗതി പറ ഞ്ഞു അവളെ രക്ഷിച്ചു.

(*b*) ഉത്തരയെ അർജ്ജുനൻ എന്തുകൊണ്ടു വിവാ ഹം കഴിച്ചില്ല.

(*c*) ആരോടുകൂടി മൃതകളി നന്നല്ലെന്നു ധർമ്മ പുത്രർ പറയുന്നു.

(*d*) "മച്ചരിത്രം പ്രകാശിപ്പിക്കരുതെന്നു മർജ്ജുനനുത്തരന്തന്നോടുചൊല്ലിനാൻ" എന്തുകൊണ്ടു.

(*e*) "ഉത്തരീയത്തിലങ്ങൊറുകൊണ്ടീടിനാം മത്സ്യരാജാവിൻ മരണംതടുപ്പാനായി" എങ്ങിനെ മത്സ്യരാജാവു മരിക്കും.

(*f*) "ശ്രീരാമവാക്യം ശിരസാഗ്രഹിതാ" എ ന്നും, "തന്നുടെപേരുചൊല്ലി വന്ദിച്ചാ ലുപ്പോലംതന്നെ" എന്നും അർത്ഥങ്ങളും ഉ ള്ള ഓരോ രണ്ടുവാക്യങ്ങളും പഠിച്ചതിൽനി ന്നു എഴുതുക.

(g) "ശ്വാക്കളൊളിച്ചുകടന്നുഹവിസ്സിനെ
ആക്കമോടിന്നുകവർന്നതുപോലെ"

ഒരം അർത്ഥം ഉള്ള ഒരു പ്രസിദ്ധപ്പെട്ടവൃത്തം എഴുതുക.

II. താഴെ എഴുതിയിരിക്കുന്നതുകളുടെ അർത്ഥം വ്യക്തമായി പറക.

(a) സാപ്രസ്സവൈരശ്രവി മിശ്രിതൈർമ്മദാസിഞ്ചന്തി.

(b) കല്പദ്രുകല്പദ്രുപദേന്ദ്രപുരീ
സാരസ്യസാരസ്യനിവാസഭൂമി.

(c) സചസചാമിഭകുതിഹിജനസ്യലോകെ
സമസ്യസംപദവിജയാപ്തിഹെതുഃ.

(d) ഉഭയഥാഹ്യരുതചമുണ്ടതവസുരാധിനാഥ
സഭയനല്ലജീവമപിചദാതുമിന്നഹം.

(e) ജാതിമുമ്പാംലതാജാതിയിതാ
സുമചയകിസലയപരിശോഭിതാ
ച്യുതമുഖതരുസംഗതാ
വിലസുന്നൂഭ്രരിഫലാനതാ.

(f) നല്പരിമളസഹിതം
ദരദലിതപുഷ്പനികരഭരിതം
കല്പതരുശിഖരം
കെല്പൊട്ടകാണുന്നേരം
സല്പമപികടിപ്പതിനിഹ വദ
ക്ഷംപ്പദമുലമടിപ്പതുമുണ്ടോ.

(g) ഇണ്ടൽതീൎന്നു കുമുദങ്ങൾ വിരിഞ്ഞു
കണ്ടതുബതതാമരകൾ വെടിഞ്ഞു
വണ്ടുകൾ വിരവൊടുതമ്മിലിടഞ്ഞു
കൊണ്ടുകുമുദനിരതന്നിലണഞ്ഞു
ഉണ്ടുമരന്ദമകുണ്ഠമദേന മുരണ്ടുപിരണ്ടീടുന്ന
തുകാണ്ക,

(h) കൂററൻചുരമാന്തിനില്ക്കുന്നതുപോലെ
യേററംചിനത്തൊടുനിന്നിതു.

III (a) "ഉന്മീലപത്രവല്ലീം" എന്നും "സുലളിത പദവിന്യാസാ" എന്നും ആദിയായ ശ്ലോകങ്ങളാലെ ശ്ലേഷയെ വ്യക്തമായി പ്രത്യക്ഷപ്പെടുത്തുക.

(b) ൦രം ശ്ലോകങ്ങളിൽ വേറെ അലങ്കാരങ്ങൾ ഉണ്ടെങ്കിൽ അവകളെ ലക്ഷണപൂൎവ്വം കാണിക്കുക.

(c) ൦രം ശ്ലോകങ്ങളുടെ വൃത്തവും രീതിയും പറക.

IV. (a) "സുമണൊരഹപഡിയൂളം" എന്നശ്ലോകം പ്രാകൃതത്തിൽ ഉണ്ടാക്കുന്നതിന്ന എന്തകാരണം. പ്രാക്രതംപോലെ വേറെ ഭാഷകൾ ഉണ്ടൊ. ഉണ്ടെങ്കിൽ അവകളെ എപ്പോൾ കവികൾ സാധാരണയായി പ്രയോഗിക്കുന്നു.

(b) പഞ്ചചാമരം ഗൌഡീരി വിയോഗിനി ഇവകളുടെ ലക്ഷണങ്ങൾ പറക.

(c) "കുരുവിന്ദദന്തിമാരെ" എന്ന പ്രയോഗം ശരിയൊ. ദന്തത്തിന്ന ഒരു വിശേഷണം പറിച്ചതിൽ വേറെ വല്ല ദിക്കിലും ഉണ്ടൊ.

(d) ക്രിയകളുടെ പ്രയോഗം എത്രവിധമെന്നു പറക.

(e) ശബ്ദങ്ങളും ഉല്പത്തികൊണ്ടും അർത്ഥംകൊണ്ടും എത്രവിധം.

V. "സ്മരസായകദൂനാം" എന്ന ഉവ്വശീ വാക്യത്തിന അർജ്ജുനൻ പറഞ്ഞ മറുവടിയും അതിന്ന ഉവ്വശിപറഞ്ഞ സമാധാനവും.

അല്ലെങ്കിൽ

ഉത്തരൻ സ്ത്രീകളുടെ മദ്ധ്യത്തിൽനിന്ന വികത്ഥനം ചെയ്ത പാഞ്ചാലിയുടെ വ്യസനിച്ച അർജ്ജുനനോട പറഞ്ഞവാക്കും അതിന അർജ്ജുനൻപറഞ്ഞ മറുവടിയും ഉത്തരനു മുത്തരയുംകൂടി ഉണ്ടായ സംവാദവും

ഇതിലേതെങ്കിലും ഒന്ന കവിയുടെ വാക്കിൽ തന്നെ എഴുതുക.

VI. "കല്യാണികാണ്ഡവല്ലഭോമാകം" എന്നാദിയായ പദത്തിന്റെയൊ "പാണ്ഡവൻ തന്റെ രൂപം കണ്ടാൻ" എന്നാദിയായ പദത്തിന്റെയൊ ഖണ്ഡങ്ങളെ പ്രത്യേകം പ്രത്യേകം ഇടത്ത അതുകളിൽ ഉള്ള അലങ്കാരങ്ങളെ പ്രത്യക്ഷപ്പെടുത്തുക.

VII. (a) പൃഥാതനൂജൻ - കുരുപുത്രൻ - സവ്യസാചി ..... മുവ്വശീ - കറുക്കാർകുന്തലാ

ം ..... യാജ്ഞസേനി - ഇതകളെ സ
മാസപദങ്ങളാക്കുക.

(b) "നിവാതകവചകാലകേയവധം" ഇതിനെ
മലയാളത്തിൽ വിഗ്രഹിക്കുക.

(c) ഗൊ - ക്ഷത്താവ - ദൈവതവനം - ഈതുക
ളുടെ നാനാർത്ഥങ്ങളും എന്ത.

(d) "മാഹാ" എന്നതിന്റെ ധാതു എന്ത.

(e) 'അസ്തു' എന്നതിന്റെ രൂപം എഴുതുക.

(f) അസ് ധാതുവിന എത്ര രൂപങ്ങളും ഉണ്ട.

(g) ഭാരതവും കാലകേയവധവും തമ്മിൽ കഥാ
വിവരണത്തിൽ ഏതെങ്കിലും വ്യത്യാസ
ങ്ങളും ഉണ്ടൊ ?

VIII. (a) ചെറുശ്ശേരി നമ്പൂതിരി - മഹിഷമംഗലത്ത
നമ്പൂതിരി - ഉണ്ണായിവാര്യർ - രാഘവ
പിഷാരൊടി - ഇവരാൽ ഉണ്ടാക്കപ്പെട്ട
ഓരൊ ഗ്രനഥങ്ങളുടെ പേരു പറക.

(b) മറജപപാന - മോക്ഷദായകപ്രകരണം -
നളചരിതം കിളിപ്പാട്ട - ബ്രഹ്മാണ്ഡ പു
രാണം കിളിപ്പാട്ട - ഇതുകളുടെ ഗ്രന്ഥ
കർത്താക്കന്മാർ ആർ.

(c) മലയാളഭാഷക്ക നമ്പ്യാരുടെ കവിതകളെ
കൊണ്ട സിദ്ധിച്ച ഗുണത്തെകുറിച്ച മു
രുക്കമായി പറക.

WEDNESDAY, 20TH JANUARY, 12 NOON TO 2 P.M.

MALAYALAM: TRANSLATION.

I. Translate into Malayalam:

(*a*) India will, on a comparison of her raw products with those of other nations, be found to exhibit only a second-rate quality in many of those articles, for the production of which she has long been famed. For instance, her raw silks are not equal in excellence to those of China or Italy. Her produce of sugar-cane is inferior in richness to that of Jamaica; her spices have less pungency than those of Ceylon, the West Indies, or the Islands of the Eastern Archipelago. Her cotton is far surpassed by that of South America. Though some kinds of her rice, grown in limited quantities, are of unsurpassed fineness, still the quality of her abundant sorts is excelled by that of the Carolina rice. Her maize is below the standard of Southern Europe; her wheat, though beginning to be esteemed and exported, cannot rival in quality the wheat of Great Britain or of the United States. Her indigenous vegetables and fruit cannot be compared with those of European countries.

(*b*) Character is made up of small duties faithfully performed,—of self-denials, of self-sacrifices, of kindly acts of love and duty. The backbone of character is laid at home; and whether the constitutional tendencies be good or bad, home influences will, as a rule, fan them into activity. "He that is faithful in little is faithful in much; but he that is unfaithful in little is unfaithful also in much." Kindness begets kindness, and truth and trust will bear a rich harvest of truth and trust.

(*c*) (1) I regret he did this. It is just like him.

(2) It was no less a person than the Governor.

(3) Your hesitation is as injurious to the progress of this affair as their rashness.

(4) Take him for all in all, I shall not look upon his like again.

II. Translate the following into English :—

(a) താവൽകല്പാന്തകാലോല്ക്കൂടപവനലുഠൽ പുഷ്ക
ലാവൎത്തകാഭ്രപ്രദ്ധ്വാനാഖൎവ്വഗൎവ്വ
ത്രൂടനപടുതരസ്ഫാരവിഷ്ഫാരനാദഃ അദ്ധാലാലാ
ടദേശപ്രവികടക്കുടിലഭ്രൂക്കുടീദുൎന്നിരീ
ക്ഷോബദ്ധാടൊപംകിരീടീപ്രതിഭടപടലീ മാഹ
വായാജൂഹാവ.

(b) വജ്രകെതുരിതിവിശ്രുതസൂദനുവജ്രബാഹുസ
ഹിതൊജവാൽ നിൎജ്ജരാധിപരിപുൎജ്ജഹാ
രപരമുൎവ്വശിമുഖസുരാംഗനാഃ അൎജ്ജുനൊപിസ
മപെത്രുവാഗ്ദിരിതിതൎജ്ജയന്നമ രസഞ്ചയൈ
ൎദ്ദുൎജ്ജയൌവരബലെനതൌന്നുരുണദൂൎജ്ജിതൈ
ശ്ശിതശിലീമുഖൈ॥—

(c) തംപിമാരിരുവരുംവന്നതില്ലെന്നുകണ്ടു സംഭ്ര
മിച്ചയച്ചിതു ധൎമ്മജൻവിജയനെചെറുത്തു നി
രൂപിച്ചുനടന്നു വിജയനുംവിരവിൽ പൊയ്ക
പുക്കിട്ടനുജന്മാരെ കണ്ടുദാഹവേഗത്താൽ
തണ്ണീർകുടിപ്പാൻ തുടങ്ങുമ്പോൾമൊഹെന കുടി
ക്കൊല്ല തണ്ണീരെന്നതുകേട്ടുകല്പിച്ചവണ്ണം വ
രുംഎന്നുറച്ചിന്ദ്രാത്മജൻനിൎമ്മലൻ തണ്ണീർകു
ടിച്ചപ്പോഴെമരിച്ചുതെ.

(d) ശോണഹയരഥാതന്നിൽവിളങ്ങിടുംദ്രോണരു
ടെകേതുതന്മേലടയാളംകാണെടൊപൊന്മയ
വേദിതത്സന്നിധൌ കാണായതശ്വത്ഥാമാ
വുമഹാരഥൻ ദ്രൊണാത്മജൻ സിംഹലാംഗ്ര

ലകെതുമാൻബാണധനുൎദ്ധരന്മാരിലഗ്രെസരൻ ക്ഷോണിയുമാദിത്യ ചന്ദ്രന്മാരുള്ളനാൾപ്രാണവിനാശമവനില്ലറികനീ.

(e) പലഹേതുന്തരേണ സംശയം ജനിച്ച നവാബിന്റെ ഭയത്തേ പോക്കേണ്ടതിന്നു ക്ലൈവു അവനു എത്രെയും സന്തോഷകരമുള്ളോരു കത്തു എഴുതി അയച്ചതിൽ പിന്നെ നവാബിന്റെ രാജ്യത്തിൽ മേൽകാൎയ്യം അന്വേഷിപ്പാൻ പാൎത്തിരുന്ന വത്സഎന്ന ഇംഗ്ലീഷ മന്ത്രിക്കു ഞങ്ങളുടെ ആലോചനയെ വേഗത്തിൽ സഫലമാക്കേണം എന്നു എഴുതി ശ്രഢമായി അയച്ചാറെ മിൎജാഫരന്റെ തമോഗുണമാശ്രയമായ ബുദ്ധിയെ വിചാരിച്ചു സംശയംതോന്നി കാൎയ്യം ഒരുക്ഷണംകൊണ്ടു തിൎക്കേണം എന്നു നിശ്ചയിച്ചു.

(f) പാപബോധം ഉണ്ടായ ഹൃദയങ്ങളിൽനിന്നു ചളിയും മലവുമായ സംശയലജ്ജാദികൾ ഒക്കയും ഈ നിലത്തിൽ ഉരുകി ചേരുകകൊണ്ടു അതിനെ നന്നാക്കികൂടാ, എന്നു സ്പഷ്ടമാകുന്നതല്ലാതെ, അതു ഇങ്ങിനെ കിടക്കുന്നതു രാജാവിന്റെ മനസ്സോടെ അല്ല; അവൻ ൧൮൦൦ വൎഷത്തിൽ അധികമായി അസംഖ്യപണിക്കാരെ അയച്ചിട്ടു തന്റെ സകല രാജ്യങ്ങളിൽനിന്നു എണ്ണമില്ലാതോളം സ്വസ്ഥോപദേശ കല്ലുകളെവരുത്തി നികത്തികൊണ്ടു നല്ല നേൎവഴിയാക്കുവാൻ പ്രയത്നം

ചെയ്യുവന്നിട്ടും ഈ അഴിനില എന്നചളി ഇ
ന്നംവരെ ശുദ്ധമായിതീന്നില്ല.

(9) വിട്ടവാക്കു, ചിന്തവേലനിനവും
വിടവാങ്ങിവിട്ടുപോക; ലോകവും
വിടുഭോഷൻപെറുവാവിഷ്ഠാണമേ!
വീക്ഷിക്കവിണ്ണിൽപ്രവേശനംസഖേ!
ഇങ്ങുവ്യാപൂരി
ദൈവകൃപയാ
ഇണ്ടൽ കിണ്ടം നോവും ചാവും നൽകുശാൽ!

III. Substitute English proverbs for;

(1) മലന്നകിടന്നതുപ്പിയാൽമാറത്തുവിഴും.

(2) മമ്മംനോക്കി അമ്പെയ്യേണം.

(3) കായ്ത്തിന്നു കഴുതക്കാലും പിടിക്കേണം.

(4) അരി എറിഞ്ഞാൽ ആയിരംകാക്ക.

(5) ശ്വാവിൻെറവാൽ പന്തീരാണ്ടു കുഴലിലിട്ടാ
ലും എടുക്കുമ്പോൾ വളഞ്ഞിരിക്കും.

(6) ഹിരണ്യനാട്ടിൽ ഹിരണ്യായനം.

IV. Give the nearest idiomatic translations of;

(1) കാച്ചവെള്ളത്തിൽ വീണ പൂച്ചയെപോലെ.

(2) വില്ലുകണ്ട കാക്കയെപോലെ.

(3) തള്ളയില്ലാത്ത പിള്ളയെപോലെ.

(4) അമരക്കയും മോരുംപോലെ.

(5) എള്ളിലെ എണ്ണപോലെ.

(6) ଦୃଷ୍ଟାଂ ଅକ୍ତିକାଙ୍ଗଷ୍ଟ କଣ୍ଟ୍ରାଟିନୋକ୍ଷଂଷ୍ଟେ ଲେ.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 12 NOON.

URIYA: TEXT-BOOKS AND GRAMMAR.

I. ଉପାସ୍ଥି, ଇଚ୍ଛାନୁଗ ପେଶୀ, ସ୍ୱୈର ପେଶୀ, ଧମନୀ, କୈଶିକା, ଶିରା, କାବାଲିୟର୍, ରୌଣ୍ଡ-ହେଉ, କବେ-ନାଣ୍ଟର୍ ଓ ଷ୍ଟାର୍ ଚେମ୍ବର୍ ଏମାନଙ୍କୁ ବୁଝାଇ ଲେଖ ।

II. "ଇଣ୍ଡିପେଣ୍ଡେଣ୍ଟ୍ ସମ୍ପ୍ରଦାୟିମାନେ ରାଜାଙ୍କ ପ୍ରାଣ-ସଂହାର କରି ଇଂଲଣ୍ଡରେ ସାଧାରଣ-ତନ୍ତ୍ର-ପ୍ରଣାଳୀ ସ୍ଥାପନ କଲେ । ଏମାନଙ୍କ ମତରେ ପ୍ରଜାମାନେ ରାଜ-ଶକ୍ତିର ନିଦାନୀଭୂତ ଏବଂ ଏମାନେ ଯାହାକୁ ମନୋନୀତ କରି-ବେ ସେ ରାଜଶକ୍ତି ଧାରଣ କରିବେ ।"

(କ) ଉଦ୍ଧୃତ ପଂକ୍ତିମାନଙ୍କର ଅଭିପ୍ରାୟର ସମ୍ୟକ୍ ଅବଗ-ତ୍ୟର୍ଥେ ପୂର୍ବାପର ଯେଉଁ ଐତିହାସିକ ବିବରଣ ଜାଣି-ବାର ଆବଶ୍ୟକ ତାହା ଲେଖ ।

(ଖ) ରେଖାରୂଢ଼ ପଦମାନଙ୍କର ବ୍ୟାକରଣ-ଗତ ବ୍ୟାଖ୍ୟା ସାଧ୍ୟାନୁସାରେ ସମ୍ପୂର୍ଣ୍ଣ କରି ଲେଖ ।

III. "ଅସ୍ଥି-ବିଶିଷ୍ଟ ଜୀବ-କଙ୍କାଳ କେବଳ ଚର୍ମଦ୍ୱାରା ଆଚ୍ଛାଦିତ ଥିଲେ ତଦ୍ଦ୍ୱାରା ଯିବା ଆସିବା ପ୍ରଭୃତି କୌଣସି କାର୍ଯ୍ୟ ସୁଚାରୁ ରୂପେ ହୋଇ ନ ପାରନ୍ତା ।" ଶରୀର-ନିର୍ମାତା ଜଗଦୀଶ୍ୱର ଉକ୍ତ ଅଭାବ ଦୂରୀକର-ଣାର୍ଥେ କି ବିଚିତ୍ର କୌଶଳ ପ୍ରକାଶ କରିଅନ୍ତନ୍ତି ତାହା-ର ବିବୃତ୍ତି ଲେଖ !

IV. (କ) "ମସ୍ତିଷ୍କ ଆମ୍ଭମାନଙ୍କର ସଂପ୍ରଜ୍ଞାର ମନୋବୃତ୍ତିର ଆଧାର ସ୍ୱରୂପ ।" ଏ ସିଦ୍ଧାନ୍ତର ପ୍ରମାଣ କଅଣ ?

(ଖ) "ଅନ୍ୟାନ୍ୟ ଜୀବମାନଙ୍କ ଉପରେ ମନୁଷ୍ୟମାନେ ଯେ ପ୍ରାଧାନ୍ୟ କରି ଅଛନ୍ତି ଉଚ୍ଚକୁଞ୍ଚ ସ୍ନାୟୁ-ଯନ୍ତ୍ର ତାହାର ପ୍ରଧାନ କାରଣ" ଏହି ମତର ପୋଷକତା ସମ୍ବନ୍ଧରେ ଯାହାଜାଣ ଲେଖ ।।

(ଗ) କ୍ଷୁଧା ଓ ପିପାସାର କାରଣ କଅଣ ଏବଂ ସେମାନେ କେତେବେଳ ପ୍ରକୃତରୂପେ କାରଣ ହୁଅନ୍ତି ?

V. (କ) ବ୍ୟବଚ୍ଛେଦ, ଉଦ୍ଭାବନ, ଯୁକ୍ତିଗନ୍ଧ, ପ୍ରତିଭୂ, ଉପନବେଶ, ଆଧୁନିକ ପତ୍ରିକା, ଧର୍ମ-ଶାସ୍ତ୍ର, ଇନ୍ଦ୍ରିୟ-ପର୍ଯ୍ୟଣ ଓ ଫଲୋପଧାୟକ ଏମାନଙ୍କର ଅର୍ଥ ଲେଖ ।

(ଖ) ନମ୍ନୋକ୍ତ କବତାମାନଙ୍କରେ କ'ଣ ଅଲଙ୍କାର ଅଛି ସେମାନଙ୍କର ନାମ ଓ ଲକ୍ଷଣ ଲେଖ ।

1. ଲତାମାନେ ଚହଁରେ କୁସୁମବନ୍ତ ହୋଇ
ଡକାନ୍ତି ଭ୍ରମରଙ୍କୁ ଗନ୍ଧକୁ ପଠିଆଇ ॥

2. ନୋହିଲେ ବା ବନକର ଅନୁଗୁଣ ।
ସନ୍ଧ୍ୟା ବାଲୀ ସଙ୍ଗରେ ଖେଳି ସାର ଫଗୁ ॥
ମନ୍ଦ ହୋଇ ପଶ୍ଚିମ ଜଲଧିକ ।
ଯାଉଛନ୍ତି ସ୍ନାନ କରିବା ପାଇଁକ ॥

(ଗ) ଉଲ-ଲେଖିତ କବତାମାନଙ୍କରେ ଯେଉଁ ପୌରାଣିକ ଘଟଣାମାନଙ୍କର ଉଲ୍ଲେଖ ଅଛି ସେମାନଙ୍କର ବବରଣ ଲେଖ ।

1. ଭୂଜଙ୍କୁ ବହୁଙ୍ଗଜ ପର ହୋଇ ।
ବଳିଲେ ଅଶ୍ୱକୁ ମହୀରେ ପକାଇ ॥

2. ଶ୍ରୀ ବିଶ୍ରୀମ ବିଷ୍ଣୁଙ୍କ ପଦକୁ ପ୍ରଦକ୍ଷିଣ ।
କରି ଅଛି ତିନି ଥର ମୁହିଁ ଜାଣ ॥

WEDNESDAY, 20TH JANUARY, 12 TO 2 P M.

URIYA: TRANSLATION.

I. ନିମ୍ନଲିଖିତ ପଂକ୍ତମାନଙ୍କୁ ଇଂରାଜିରେ ଅନୁବାଦ କର ।

(କ) ସୀତାଙ୍କୁ ଖୋଜିସାରି ଶିଂଶପା ବୃକ୍ଷରେ ।
ଲୁଚି ବାତସୁତ ସେ ବନ ପ୍ରଦେଶରେ ।
ପକାନ୍ତେ ନେଏ ଦୁଇ ସେ ବନର ଶୋଭା ।
ଦେଖିଲେ ହୋଇ ଅଛି ଅତିଶୟ ଲୋଭା ।
ସେହିଠାରେ ରାକ୍ଷସୀମାନଙ୍କୁ ଦେଖିଲେ ।
ବିକୃତ ଭୟଙ୍କର ରୂପ ସେ ଧରି ଥିଲେ ।
କେବଣ ରାକ୍ଷସୀର ତିନୋଟା ଅଟେ କର୍ଣ୍ଣ ।
କେବଣ ରାକ୍ଷସୀର ଶ୍ରବଣ ଲମ୍ବମାନ ।
କାହାର ଶଙ୍କୁ ପରି କାହାର ନାକ ନାହିଁ ।
କାହାର ଏକା ଆଖି ଗୋଟାଏ ଅଟଇ ।
କେଉଁମାନେ ଅଟନ୍ତିହିଁ ଏକ କର୍ଣ୍ଣ ।
କେଉଁ ରାକ୍ଷସୀଏ ଅଟନ୍ତି କର୍ଣ୍ଣହୀନ ।

(ଖ) ଏ ବନ ପରି ଆନ କାନନର ଶୋଭା ।
ମୋହର ନୟନକୁ ହୋଉ ନାହିଁ ଲୋଭା ।
ସମ୍ପାତି ଏହି ବନ ଥିଲା ସିନା କହି ।
ଏହିଠାରେ ଦେଖିବି ସନ୍ଦେହ ଲାଗୁ ନାହିଁ ।
ଏହିରୂପେ ବିଚାର ଛିଣ୍ଡାଇ ହନୁମାନ ।
ରହିଲେ ତହିଁ ପଏ-ଗହଳେ ହୋଇ ଲୀନ ।

(ଗ) ଯେଉଁ ଲୋକମାନେ ବହୁକାଳ ପର୍ଯ୍ୟନ୍ତ ନିର୍ବାସିତ ହୁଅନ୍ତି ସେମାନେ ମନେ କରନ୍ତି ଯେ ଆମ୍ଭ ବନ୍ଧୁମାନେ ଯେପରି ପୂର୍ବରେ ଆମ୍ଭଙ୍କୁ ସ୍ନେହ କରୁଥିଲେ, ସେହି ସ୍ନେହ ସର୍ବଦା ଆମ୍ଭମାନଙ୍କଠାରେ ଥିବ । ଆମ୍ଭେମାନେ ଯେତେବେଳେ ସ୍ୱଦେଶକୁ ଯିବା ତେତେବେଳେ ଅବଶ୍ୟ ସ୍ନେହ କରିବେ, ମନମୌଥଙ୍କର ଏହି ବିଶ୍ୱର ଥିଲା ଯେ ଦ୍ୱିତୀୟ ଜେମ୍ସ୍ କେତେବେଳେ ପ୍ରଜାପ୍ରିୟ ହୋଇ ପାରିବେ ନାହିଁ, ଆଉ ଆମ୍ଭେ ଯେତେବେଳେ ଇଂଲଣ୍ଡରେ ଉପସ୍ଥିତ ହେବୁଁ ତେତେବେଳେ ପ୍ରଜାମାନେ ଆମ୍ଭର ପକ୍ଷ ହେବେ । ତାହା ହେଲେ ଆମ୍ଭେ ଆବଶ୍ୟ ରାଜା ହୋଇ ପାରିବୁଁ ।

(ଘ) ଯେଉଁ ଛାତ୍ରିର ମନ ଗୁରୁନାମ ସ୍ମରଣ ହେବା ମାତ୍ରିକେ ସ୍ନେହ ଓ କୃତଜ୍ଞତା ରସରେ ଆର୍ଦ୍ର ହୁଅଇ, ସେ ଛାତ୍ରି ଅବଶ୍ୟ ବିଦ୍ୱାନ୍ ମଣ୍ଡଳୀରେ ଆସନ ଓ ଗୌରବ ଲଭିବ । ଯେ ଆମ୍ଭମାନଙ୍କ କିମନ୍ତେ ଦେହ ଓ ମନର କ୍ଳେଶ ସ୍ୱୀକାର କରି ଉତ୍ସାହ ଯତ୍ନ ସହିତରେ ଅକପଟ ହୃଦୟରେ ଆମ୍ଭମାନଙ୍କୁ ଶିକ୍ଷାଦାନ କରନ୍ତି ତାହାଙ୍କ ନିକଟରେ ଯେଉଁ ଛାତ୍ରି କୃତଜ୍ଞ ନ ହୁଅଇ ସେ ଅତି ପାଷଣ୍ଡ । ଶିକ୍ଷକଙ୍କଠାରେ ସଦା ବିନୟୀ ହୁଅ । ବିବେଚନା କରି ଦେଖ ପିଲାକାଳରେ ଆମ୍ଭମାନଙ୍କର ହିତାହିତ ଓ କର୍ତ୍ତବ୍ୟାକର୍ତ୍ତବ୍ୟ ଜ୍ଞାନ ନ ଥାଏ । ଆମ୍ଭେମାନ ପଦେ୨ ଭ୍ରମରେ ପଡି ପାରୁଁ । ଆମ୍ଭମାନଙ୍କର ସେହି ଭ୍ରମ ସଂଶୋଧନ ପାଇଁ ଶିକ୍ଷକ ମହାଶୟ ଯେବେ ଆମ୍ଭମାନଙ୍କୁ କୌଣସି ଦଣ୍ଡ ଦିଅନ୍ତି ତେବେ ଆମ୍ଭମାନଙ୍କର ତାହାଙ୍କ ପ୍ରତି ଦ୍ରୋଧ କରିବାର ଉଚିତ ନୁହଇ । ଆମ୍ଭେମାନେ ଶିକ୍ଷା ଗୁରୁଙ୍କଠାରେ ସହସ୍ର ପ୍ରକାରେ ରୁଣୀ ଅଟୁଁ ।

II Translate into Uriya.

WEDNESDAY, 20TH JANUARY, 3 TO 5 P.M.

ORIGINAL COMPOSITION IN VERNACULAR LANGUAGE

Write an Essay on *one* of the following:—

The influence of custom upon opinion;

OR

The use and abuse of reading.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

PURE MATHEMATICS.

I. Explain a method of approximating to the roots of the equation $ax^2 + bx + c = 0$, when b^2 is large compared with ac

Solve the equation—

$$(x-4)^3 - 7 = 2\left(\frac{1}{x} - x\right).$$

II. Find (assuming if you please the Binomial Theorem) the number of combinations of n things taken one, two, three, &c, at a time up to n.

At a certain election the number of vacancies is p, and a voter can vote either for any p of the candidates or for any $p-1$ of them. He can thus vote in m different ways when there are $p+2$ candidates, and in n different ways when the number is $p+3$. Show that

$$\left(4.\frac{n}{m} - 3\right)\left(4.\frac{n}{m} - 2\right)\left(4.\frac{n}{m} - 1\right) = 1.2.3\ m.$$

and if $n = 2m$, that the number of vacancies is *four*.

III (*a*) If $A = 250°$ and $B = 120°$, establish, by a geometrical proof, the formula $\cos(A-B) = \cos A \cos B + \sin A \sin B$.

(*b*) Eliminate β from

$$\tan\theta = \frac{\sin\alpha + \beta - \sin\beta}{1 + \cos\alpha + \beta - \cos\beta}.$$

$$\tan\frac{\alpha}{2} = \frac{\sin\beta}{2 - \cos\beta}.$$

showing that $\sin\theta = \pm 2\sin\frac{\alpha}{2}$.

IV. If ABC be a triangle; AD, BE, CF the perpendiculars intersecting at O, from the angular points on the opposite sides; L, M, N, the points of bisection of AO, BO, CO, and P, Q, R, the points of bisection of BC, CA, AB, respectively; show that the nine points D, E, F, L, M, N, P, Q, R lie in the circumference of a circle, of which the radius is a geometric mean between the radii of the circles circumscribing the triangles BMD, CND.

V. Three vertical towers P, Q, R of heights a, b, c respectively stand in the given order in the same straight line on a horizontal plane. If the distances PQ, QR be d, e, prove that they cannot all subtend equal angles at any point in the plane unless

$$(a^2 - b^2)\, e > (b^2 - c^2)\, d.$$

VI. If a straight line be bisected and be also divided into two unequal segments, show that the sum of the squares on the unequal segments is double of the square on half the line and of the line between the points of section.

VII. Circles are described passing through the angular points B, C of a triangle ABC, and cutting the sides AB, AC or these produced in D, E; D′, E′; &c. Show that the chords DE, D′ E′, &c., are parallel to each other.

VIII. Give Euclid's definition of Ratio and Proportion and compare it with the Arithmetical definition.

Prove that equiangular triangles are to one another in the duplicate ratio of their homologous sides; and enunciate the corresponding property in the case of equiangular parallelograms.

IX. Prove that the curve formed by the intersection of the surface of a right cone with a plane is in general a conic section; and state the conditions which determine whether the curve is a parabola, ellipse or hyperbola, and state what other forms the section of a cone may assume.

X. If the tangent at the point P of an ellipse meet the major axis produced in T, and PN be the ordinate of P; prove that $CT\ CN = CA^2$.

If CP meet the directrix nearer to P in Q and S be the nearer focus, prove that TQ is parallel to SP.

XI. Define *Conjugate Diameters*, *Asymptotes*.

If through any two points Q, Q′ of an hyperbola a line RQQ′R′ be drawn meeting the asymptotes in R, R′; then will RQ = R′Q′.

THURSDAY, 21st JANUARY, 2 TO 5 P.M.

STATICS AND DYNAMICS.

I. Assuming the parallelogram of forces to be true for two forces at right angles to one another, prove its truth for forces inclined at any angle.

D is the point where the inscribed circle touches the side BC of a triangle ABC; E, F are the middle points of BC, AD. Show by finding the direction of the resultant of a system of forces BA, CA, BD, CD that EF passes through the centre of the inscribed circle.

II. Obtain the *analytical* conditions of equilibrium of a system of co-planar forces acting on a rigid body.

Two uniform beams AC, BC, of the same material and thickness and connected by a smooth joint at C, are placed in a vertical plane, their other extremities which rest on a smooth horizontal plane being connected by a string. If the angles CAB, CBA be α, β, and θ be the inclination to the horizon of the reaction at the joint, shew that

$$\tan\theta = (1 + \sec\alpha \sec\beta)\tan\frac{\alpha-\beta}{2}.$$

III. Find the centre of inertia of a triangular area. Given four points on a circle of radius a, show that the centres of inertia of the four triangles that can be formed from them lie on another circle of radius $\frac{a}{3}$.

IV. Explain the terms co-efficient of friction, angle of friction, cone of friction.

A uniform beam, of which one end rests against a rough vertical wall, is supported by a light rope attached to the other end and to a given point in the wall. If the rope be twice as long as the beam, and the co-efficient of friction be $\sqrt{3}$, prove that the limiting position of the beam is horizontal.

V. How is angular velocity measured?

A point is moving with a uniform linear velocity along the circumference of a circle. Show that its angular velocity about a point in the circumference is equal to its linear velocity $\div$ the diameter of the circle.

VI. A railway train moving at the rate of 15 miles an hour is brought to rest in one minute, the retarding force of the engine

being supposed uniform during the time. Show that this force : the weight of the train : : 11 : 966.

VII. Two particles of masses m, n, are connected by a string stretched over a smooth peg, each particle hanging freely. Determine the motion and the tension of the string.

P, Q, R are three masses of 5, 3 and 4 lbs respectively. P and Q are connected by a string stretched over a smooth fixed peg. Q and R are connected by a string, part of which lies coiled on a table vertically below Q. When P and Q have been in motion for 12″, the string connecting Q and R becomes stretched. Show that the impulse of the tension of the string connecting P and Q is to that of the string connecting Q and R as 5 to 8.

VIII. Assuming the path of a projectile *in vacuo* to be a parabola, find the time of flight and the horizontal range.

A, B, C are three points in order in a horizontal line, and CD is a vertical line. Shots fired with equal velocities from A and B in directions inclined at 45° to horizon both pass through D. If AC = a, BC = b, CD = c, show that $\frac{1}{c} = \frac{1}{a} + \frac{1}{b}$, and that the velocity of projection is $\sqrt{g\,(a+b)}$.

IX. A particle of mass m moving with velocity v impinges obliquely on a smooth inclined plane. Find the motion of the particle immediately after impact, taking the particle to be (1) elastic, (2) inelastic.

A ball of elasticity $\frac{1}{2}$ falls from a vertical height h on an inclined plane. Show that it will strike the plane again after an interval equal to the time of its fall; and that if the plane is inclined at 45° to the horizon, its range on the plane is $\frac{3}{2}\sqrt{2}.\,h$.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

BOTANY.

I. Describe in technical language the plants marked *A* and *B* and refer them to their natural orders, giving your reasons for so doing.

II. Green plants when grown in the dark become *etiolated*. What is the cause of this?

III. Describe the *pericarp* of the mango.

IV. What is the difference between *albuminous* and *exalbuminous* seeds? Mention examples of each kind.

V. What are *laticiferous vessels*? In what plants and in what parts of the plants do they occur?

VI. Explain the meaning of the following terms:—*Carpophore, anatropous, monocarpic, mycelium, testa, corymb, meristem.*

THURSDAY, 21ST JANUARY, 2 TO 5 P.M.

CHEMICAL PHYSICS.

I. Describe the method of finding, with the balance and an auxiliary solid, the specific gravity of a solution of a salt.

II. Give a short account of the process of dialysis, stating Graham's explanation of it, and his two-fold classification of substances.

III. Sketch, in section, the common (Pepys') gas-holder; and explain how to use it.

IV. A Eudiometer, graduated with 30 divisions to the inch, stands with its zero 6 inches above the mercury in a mercury trough: I read off that a gas occupies 120 divisions over the mercury. What volume correction for pressure shall I have to make if the mercury barometer stands at 30 inches at the time?

V. State clearly, and account for, the difference in behaviour of a saturated and a non-saturated vapour when subjected to variations of pressure.

VI. How is the specific heat of a gas determined? What difference does it make in the determination if the gas be kept (i) at a constant volume, and (ii) under a constant pressure?

VII. A bath contains 200 lb. weight of water at a temperature of 70° F. What weight of steam (at 100° C.) must be passed into it to raise its temperature to blood-heat (98° F.)?

VIII. How is an achromatic combination of lenses possible?

IX. Give briefly, but clearly, the ordinary theory (Kirchhoff's) which explains the dark lines seen in the Solar spectrum. Are *all* these dark lines *Solar* in origin?

X. Give the physical explanation of the colours seen on the surface of a soap bubble.

XI. What are the three elements of the earth's magnetism? Describe in a general way the variations to which these elements are liable.

XII. Give a short description of Holtz's, or Voss's or Wimshurst's Induction Electric Machine.

XIII. What is the law connecting the direction of a galvanic current with (i) its action on a magnetic needle, and (ii) the polarity of a solenoid?

XIV. Describe, in a general way, the method of Electrotyping in copper, and of Electroplating with silver.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

DEDUCTIVE LOGIC.

I. Define 'Deductive Logic' with reasons for the view you adopt.

State the ultimate assumption or assumptions of Formal Logic as held by Hamilton and Bain. Discuss, stating your view with reasons.

II. Different views are held as to the fundamental type of all reasoning. State these, and give your own view with reasons.

III. (*a*) Classify Propositions logically:—(1) on the principle of external form;

(2) on the principle of Import or Meaning.

(*b*) Is the *predicate* to be interpreted in comprehension or in extension?

IV. (1) Given that the major term is distributed in the premise and undistributed in the conclusion of a valid syllogism, find directly the mood and figure.

(2) Is there a valid conclusion to either premise from the other premise and the conclusion, in the valid moods of the Third Figure?

V. (*a*) Give an example of a valid argument which cannot be exhibited in ordinary syllogistic form.

(*b*) Throw the following into syllogistic forms and examine their validity:—

(1) "Those who bribe should not, any more than any other law-breakers, be exempt from punishment."

(2) "Persons who pretend to form an opinion on philosophic subjects are oftentimes incapable of doing it properly from want of acquaintance with the exact sciences."

(3) Many things inexpedient, because wrong, are apparently useful."

(4) "Some things which are not much written about are not worth learning; not that this circumstance is otherwise an index, except in this manner, that all really useful learning has its opponents and it is only where there is opposition that much discussion ever takes place."

VI. Explain:—

(1) A particular proposition is only 'a may be particular.'

(2) The affirmation of a universal proposition or the denial of a particular one enables us to affirm or deny all the other three; but the denial of a universal proposition or the affirmation of a particular one leaves us unable to affirm or deny two of the others.

(3) Mediation, alleged to be the peculiar attribute of the syllogism, may be admitted to be an indication of some *complexity* in the syllogistic process, but cannot be viewed as the basis of a distinction in *kind* between it and the various forms of immediate inference.

VII. Shew that in the ordinary sorites (1) only one premise can be negative and it must be the last, and (2) only one premise can be particular and it must be the first.

VIII. (1) On what grounds has it been held that Hypothetical Syllogisms are cases of immediate inference?

(2) 'Either A is B or C is D;' give its equivalent hypothetical.

(3) Is "If A is B, C is not D" the contradictory of "if A is B, C is D"?

(4) To what fallacy of the categorical syllogism is the fallacy of 'affirming the consequent' reducible?

(5) What is a Dilemma? Whence its illusory nature? Give an example of its legitimate use from Geometry.

THURSDAY, 21ST JANUARY, 2 TO 5 P.M.

INDUCTIVE LOGIC AND DEFINITION.

I. What is the reason why so many Logicians from Aristotle downwards have attempted to bring Induction under Deduction? Give some of the leading forms of the Inductive Syllogism, and point out and discuss the vices which have been ascribed to them. Does Mill try to bring Induction under Deduction when he says that every induction may be thrown into the form of a Syllogism, the ultimate major premise of which is a proposition expressing the uniformity of Nature?

II. Preparatory to the application of observation and experiment, a process of "Mental Analysis" is recommended. Describe this operation.

How is it distinguished from the scholastic method of seeking to deduce the order of Nature from the ideas in our minds, against which Bacon contended?

III. Define Cause and Effect, in terms of Hume's theory of Causation, of J. S. Mill's theory, and of the Conservation of Energy.

State and explain the principle of the Conservation of Energy.

Distinguish between the dynamical and the collocating agents. What do you consider to be the leading advantages in stating Causation as Conservation rather than as Mill puts it?

How is a uniformity of Causation to be distinguished from other kinds of uniformities. What is the nature of the evidence on which

the law of Universal Causation rests? Is it sufficient to justify us in making this law a test of all other inductions?

IV. Are all uniformities of Causation resolvable into one law or uniformity? Discuss the question.

V. Compare the methods of Agreement, Difference, and Concomitant Variations with respect to (*a*) their psychological and logical basis, (*b*) their applicability, and (*c*) their cogency.

(1) What was the principal method or methods employed by Flourens to ascertain the functions of the brain?

(2) What method would you employ in order to explain the following phenomenon:—When a magnetic needle is suspended by a silk thread, and set in vibration, it comes much sooner to rest when suspended over a plate of copper, than when no such plate is beneath it?

VI. What are Representative Hypotheses? What condition or conditions of a legitimate hypothesis do they fail to satisfy? What are their uses in scientific enquiry?

VII (*a*) A person professes to have invented a perpetual motion.

(*b*) A person, noted for his kindness of heart, is accused of an act of cruelty.

Would you believe or disbelieve the statements equally, or would you believe the one and disbelieve the other? On what considerations would your conviction be based in each case?

Are you prepared to acquiesce in the statement that the assertion of a fact wholly beyond the reach of evidence for or against it is to be held untrue? Give reasons for your answer.

VIII. Apply the positive and negative Canons of Definition to the definition of "Matter."

In seeking for the definition of a name one has often to choose between sacrificing either denotation or connotation. Which is usually the preferable course, and why?

IX. What are the two main divisions in a Natural History Science?

The rule of classification is to bring together the things that have in common the greatest number of important attributes. What is the test of the "importance" of an attribute?

State what devices have been or may be employed in classification when we meet with a plurality of affinities of nearly equal value, and what is your opinion of them?

What is the definition of species in Natural History? In what respect has the conception of "Species" been modified in recent times?

PRACTICAL CHEMISTRY.

QUALITATIVE ANALYSIS.

Each candidate was required to analyse two powders and one solution selected from the following substances:—Ammonium Sulphide. Baryta water. Hydrochloric acid. Lime water. Sulphuric acid. Water. Ammonium Bromide. Antimony trisulphide. Borax. Cadmium chloride. Calcium hydroxide. Magnesium carbonate. Magnesium oxide. Manganese dioxide. Potassium arsenite. Potassium bromide. Potassium chromate. Potassium iodide. Potassium nitrate. Potassium sulphate. Strontium nitrate. Zinc chloride. Zinc oxide. Zinc sulphate.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

HYDROSTATICS AND PNEUMATICS.

I. Define a perfect fluid, and prove that the pressure at a point in it is the same in all directions.

II. Describe the hydraulic press (Bramah's), and explain its action.

The plungers of a hydraulic press have radii of $2\frac{1}{2}$ inches and $\frac{3}{4}$ inch respectively, and the mechanical advantage of the lever handle is 12. Find the force which must be applied at the handle to support 21 cwt. If the length of the stroke of the small plunger be 2 inches, find how far the large one will rise for 35 strokes.

III. Define total pressure, and show how to find the total pressure on any surface immersed in fluid exposed to the pressure of the atmosphere.

A triangle is immersed in two fluids resting on each other so that one side is in the free surface of the upper fluid

and the centre of inertia of the triangle is in the common section of the fluids. If the pressure on the part immersed in the lower fluid is to that on the part immersed in the upper fluid as 3 . 1, compare the densities of the fluids.

IV. State and prove Archimedes' principle with regard to the amount and line of action of the vertical pressure experienced by a body immersed in fluid. Explain how it may be verified experimentally.

V. A triangular lamina ABC, right-angled at C, rests in water with the side CA vertical and three-fourths immersed, the angle B being supported by a string. Find the density of the lamina and the tension of the string.

VI. Describe any method of finding the specific gravity of each of the following substances :—

(1) fragments of a solid ($\rho > 1$), (2) a solid ($\rho < 1$), (3) a viscous liquid.

The volume of a hydrometer up to the point to which it sinks in water is 1 c. in., and the section of the stem is $\frac{1}{15}$ square inch. Find how far it will sink if immersed in a mixture of spirit containing 20 per cent. by weight of water, the density of spirit being 0 8.

VII. Describe the Standard Barometer, and state the corrections to be applied to its readings.

Calculate the correction for temperature.

VIII. State the laws of Boyle and Gay Lussac, and hence deduce that the product of the volume and the pressure of a given quantity of gas is proportional to the absolute temperature.

A closed cylinder 31 inches long having its axis horizontal contains air, and a frictionless air-tight piston 1 inch thick rests equally distant from the ends when the temperature is the same throughout. One end is then raised to a temperature of 100° C and the other kept at 12° C. Find how far the piston will move along the cylinder, the zero of absolute temperature being — 274° C.

IX. Describe any form of pressure-gauge.

X. Describe, and explain the action of the common water pump. Find the tension of the piston rod at any point in the stroke and the work done in a stroke.

FRIDAY, 22ND JANUARY, 2 TO 5 P M.

OPTICS AND ASTRONOMY.

I. Distinguish between—

(1) the geometrical and the principal focus of a reflected or refracted pencil.

(2) a real and a virtual image.

Find the positions of the geometrical and the principal focus of a pencil directly reflected at a spherical surface; and illustrate by diagrams the cases where the image is (1) virtual and erect, (2) real and inverted.

II. State the laws of refraction, and explain clearly what is meant by the critical angle.

If a luminous point be placed at a depth d beneath the surface of still water ($\mu = \frac{4}{3}$), find the area of the surface which is effective in transmitting light.

III. Find the deviation of a ray of light refracted through a prism in a principal plane.

If the pencil be incident on the base of a triangular prism, and emerge at the base after reflection at the other two sides, show that the deviation is least, when the angles of incidence and emergence are equal; and if D_1 be the least deviation, prove that

$$\text{Cos } \frac{D_1}{2} = \mu \cos (\pi - i).$$ i being the angle of the prism.

IV. Define the focal length of a lens: and find an expression for it when r and s are the radii of the spherical surfaces, and μ the refractive index.

Two plano-convex lenses, exactly similar, are so placed as to form a double convex lens; find its focal length, if r be the radius of the spherical surfaces, and μ, μ' refractive indices, the thickness being neglected.

V. Find the magnifying power of an Astronomical Telescope in its simplest form. Should the eye-piece of such a telescope, adjusted for ordinary sight, be drawn out or pushed in for a short-sighted person, and why?

VI. (*a*) Explain the terms:—

Right ascension, latitude, hour angle and azimuth of a star.

(*b*) By what observations may we determine the position of the meridian?

(*c*) If a vertical rod at noon be m times longer than its shadow when the sun's declination is δ, find the latitude of the place.

VII. Show how to determine the position of the first point of Aries.

How may the obliquity of the ecliptic be obtained from observations of the sun's altitude at the solstices?

VIII. Distinguish between mean and apparent solar time.

Show by diagrams when the component parts of the equation of time are subtractive, and when additive.

IX. Describe the respective effects of refraction, aberration, and parallax upon the apparent position of a star.

How may the effect of aberration be distinguished from that of annual parallax?

X. Explain by means of a figure the retardation of the moon's rising on successive days, and indicate the conditions that this may be a minimum.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

CHEMISTRY.

I. How much oxygen by weight and by volume is required to burn a mixture of two litres of marsh gas and one litre of carbonic oxide? What are the weight and volume of the resultant gases at a temperature of 100° C and under a pressure of 750 m. m. of mercury?

II. How can it be proved experimentally that ammonia is a compound of three volumes of hydrogen and one volume of nitrogen condensed to half their original volume?

III. Give a brief description both of Leblanc's and of Solway's (or the ammonia-soda) process for manufacturing carbonate of soda from common salt. Give equations.

IV. Name the oxides and oxy-acids of chlorine, bromine and iodine. How may they be prepared?

V. What are the most important compounds of lead and zinc found in nature. How are these metals extracted from their ores, and how is lead desilverized?

VI. Give equations for the changes, if any, which occur when hydric sulphide is passed into solutions of:—Ammonium chloride, Strontium nitrate, Nickel sulphate, Cobalt nitrate and Sodium acetate, Manganous chloride, Potassium chromate, Ferric chloride, Copper sulphate.

VII. How is hydrogen dioxide prepared? Give examples of its oxidizing, also of its reducing action, and explain why it is capable of acting in both ways.

VIII. Name some of the principal methods employed for oxidation and for reduction.

IX. State the principal points of resemblance between oxygen and sulphur and between carbon and silicon.

FRIDAY, 22ND JANUARY 10 A.M. TO 1 P.M.

THEORY OF MORALS.

I. There is some diversity among moralists as to what precisely constitutes, or is included in, the object of moral approbation or disapprobation. Point out such difference and indicate your own view with reasons.

II. (*a*) It is usual to classify moral theories as Intuitional and Utilitarian. Are these terms opposed to one another in such a way as that a moralist cannot be both Intuitional and Utilitarian? Examine this.

(*b*) How would you subdivide each of these great divisions?

III. Cudworth wrote a treatise entitled "concerning Eternal and Immutable Morality." Bain holds that morality, to some extent at least, is immutable and eternal. Do these two writers mean precisely the same thing?

IV. From the alleged fact that "the ethical end that men are tending to and may ultimately adopt without reservation" is utility, Bain argues that the moral standard that *ought to be* is utility.

(1) State with what reservations this end is adopted at present; (2) Give the proofs of the unreserved

adoption of this end in future; (3) Develop the argument from the alleged fact to the inferred conclusion.

V. It is argued that the theory that attributes the existence of moral distinctions to the flat or will of the Creator logically leads to the conclusion that the Creator is a non-moral being. On what grounds? Suppose the conclusion valid, would attributing moral distinctions to, not the will, but the nature of the Creator make any difference?

VI. The Utilitarian argues that, since moral rules are unquestionably useful, therefore utility is the essence of morality. The Intuitionalist argues that since the truly virtuous man practices moral rules "in scorn of consequence," therefore the rules of morality are absolutely right, apart from consequences. Develop the argument in each case and state how the one side answers the other.

VII. (*a*) "Quantity of pleasure being equal, pushpin (a childish game) is as good as poetry."

(*b*) "It is better to be a human being dissatisfied than a pig satisfied."

The above quotations from professed Utilitarians indicate a difference. What? Some maintain that the latter quotation is incompatible with thorough-going utilitarianism. Discuss this.

VIII. It is argued on the one hand that the origin of the moral faculty makes no difference to its authority; on the other hand, that, on the theory that the moral faculty is the product of association, whether in the history of the individual or of the race, morality loses its authority and a most powerful motive to its practice. Discuss this point.

IX. Leslie Stephen argues that it makes no difference whatever to our notion of morality whether the will is free or not. Sidgwick admits that it does make some difference. Kant holds that the freedom of the will is essential to the idea of morality. Discuss this.

X. Discuss the following:—

(*a*) "Suppose a Utilitarian is asked how he voted in the recent election. If he wishes to conceal his vote he may easily think it right to answer falsely; for the utilitarian reasons against falsehood are, (1) The immediate harm done by misleading a particular individual, and (2) the tendency which each

falsehood has to diminish the mutual confidence that men ought to have in each other's assertions. But in this case, it may be expedient that the questioner should be misled; and in so far as the falsehood tends to produce a general distrust of all affirmations about voting it only furthers the end for which the voting has been made secret."

(*b*) John Stuart Mill in arguing against Mansel, puts his case virtually thus: "If I were convinced that the Ruler of the Universe acts on principles which the highest human morality does not sanction, I would refuse to call such a Being good and to worship Him, even if I knew that He would sentence me to hell for my refusal."

It has been contended that Mill is here virtually giving up his utilitarianism

---

FRIDAY, 22ND JANUARY, 2 TO 5 P.M.

HISTORY OF MORALS OF THE XVIII CENTURY.

I. Different views are held as to the nature and ground of moral obligation. Compare, in this respect, the following mora lists —Hobbes, Clarke, Locke, Paley, Butler.

II. Compare ancient with modern theories of Ethics as regards the place assigned in them to the *Summum Bonum*. Compare the *Summum Bonum* of the Epicureans, Stoics and Kant. According to Kant, how only can the *Summum Bonum* be realised?

III. "Hutcheson represents the opposite pole of Intuitionism from Kant." Bring out the antithesis.

IV (*a*) If it be true that "when virtue is become habitual, when the temper of it is acquired, what was before constraint ceases to be so, by becoming choice and delight," does this fact create any difficulty to one who accepts Kant's theory?

(*b*) Kant describes the Categorical Imperative as one that determines the will solely by its form and not by its matter. Examine whether this is, or is not, consistent with the second formula of the Categorical Imperative; also with Kant's doctrine of the moral motive.

V. Leslie Stephen says :—"Even Butler in spite of the depth of his moral sentiments is consenting to make virtue a question of profit or loss. In his anxiety to make possible concessions he is endangering the very core of his teaching."

Refer to passages in Butler that explain this criticism and give your own opinion as to its correctness.

VI. It is argued that if Paley's Ethical Theory is accepted, it follows that one who has no knowledge of a future state can have no perception of Duty. But one who can have no perception of duty is incapable of doing wrong. Hence on Paley's theory one who has no knowledge of a future state, is incapable of doing wrong Explain and examine this.

VII. Leslie Stephen remarks on "the curious vascillation that runs through Locke's reasoning upon morality and which makes moral truths at one time uncertain and at another mathematically demonstrable."

Sidgwick calls Locke's Ethical Theory "One of those composite systems in which the Intuitional method is united with the first principle of Egoistic Hedonism."

Explain these criticisms.

VIII. "The effectiveness of Butler's famous argument against the vulgar antithesis between self-love and virtue is undeniable." State the argument.

IX. Adam Smith in classifying moral theories puts De Mandeville's in a separate class as a "licentious system" on the ground that it tends to subvert the established belief that virtue is worthy of esteem and vice of contempt.

Refer to De Mandeville's Ethical views in justification of this criticism.

X. In the Preface to his Sermons, Butler distinguishes between two methods of ethical enquiry, the one of which he declines with his good will, the other of which he adopts. Compare the two, stating which Butler adopts, and also naming moralists of the XVIII Century who adopt the other.

XI. "We may observe how widely moralists diverge in estimating the ethical value of Self-Love." Compare in this respect the following :—Butler, Helvetius, Kant.

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M.

MENTAL PHILOSOPHY.

I. What are the methods of research available to the Psychologist?

Is Psychology a Science?

Distinguish Psychology from Philosophy.

II. What does Bain understand by the Discriminative Sensibility of Muscle? Into what different kinds does he divide this sensibility, and what portion of our knowledge of the external world does he ascribe to each?

III. State the laws of Contiguity and Similarity, and show that in the actual working each implies the other. To which of them, if at all, would you give priority and why?

How far do the Laws of Association explain Memory?

What is Hamilton's Law of Redintegration?

Is Contrast a distinct principle of Association?

IV. What is Berkeley's Theory of Vision? How does the form in which the theory is now presented differ from the Berkeleian form?

How does Bain show that distance *cannot* be an original perception of vision, and how does he meet the arguments urged in favour of intuitive perception of distance from the example of lower animals?

What is the bearing of the Evolution Theory on this question?

How does the Stereoscope furnish an argument in favour of the Berkeleian Theory?

V. Account for the following:—

(*a*) A room, when empty, looks smaller than when furnished;

(*b*) A person watching a train about to start and vividly expecting its movements sometimes falls into the illusion that it begins to move before it actually does so;

(*c*) When one eye is pressed slightly aside, objects appear double;

(*d*) The greater the number of accessories to any fact the better seems our intellectual hold of that fact;

(*e*) We can often recall the initial letter of a person's name without being able to recall the whole name;

(*f*) One goes to bed perplexed over a complicated problem, and after a night's sleep rises up with the problem completely solved.

VI What is an Emotion?

What is the plan of treatment adopted by Bain in describing the Emotions?

State Darwin's or Spencer's laws of the Expression of the Emotions.

Does the Expression precede or follow or co-exist with the Emotion? Are they related as cause and effect?

Exemplify the close connexion that exists between an Emotion and its Manifestation.

VII. What does Hamilton understand by Cosmothetic Idealism?

Is he justified in classifying Berkeley and Kant under this head?

Discuss the question whether Bain is a Cosmothetic Idealist.

VIII. What is Bain's Analysis of Matter?

Does Mill's Analysis of Matter as Permanent Possibility of Sensation imply that Matter does not exist as an independent reality?

Does the theory of Evolution favour Realism or Idealism? "Should", says Spencer, "the Idealist be right, the doctrine of Evolution is a dream." Is Spencer then a Realist?

IX. What according to Masson are the two Ontological questions; and what answers to each of these questions have been given by Kant, Schelling, Cousin, Comte, Hamilton, Mill and Spencer

X. What is meant by:—

(1) Transcendentalism.

(2) The Universal Postulate (of Spencer)

(3) Things-in-themselves

(4) The Double-Aspect Theory.

(5) The Law of the Conditioned (of Hamilton).

(6) The Volitional Theory of Causation.

(7) The Categories of the Understanding.

SATURDAY, 23RD JANUARY, 2 TO 5 P M.

HISTORY OF ENGLAND.

I. The reign of Henry II is said to have initiated the "Rule of Law" Justify this statement.

II Trace briefly the history of the English Parliament during the reigns of the first three Edwards, attending mainly to (*a*) its composition, and (*b*) the powers it obtained.

III. Sketch briefly the history of the Reformation in the reign of Henry VIII, referring to the chief acts of Parliament that were passed in favor of the movement.

IV. Why were the seven Bishops tried? How did the trial influence the subsequent political history of the country?

V. Narrate briefly the circumstances that led to the American Declaration of Independence.

VI. Give the chief provisions of the following, mentioning at the same time the circumstances that led to their introduction or the ends secured by them:—

(1) Statute of Provisors.

(2) The Habeas Corpus Act.

(3) The Reform Act of 1832.

THE AGE OF ELIZABETH.

VII. (*a*) Sketch, in outline, the history of the relations between England and Spain during the reign of Elizabeth.

(*b*) Mention the main features of Elizabeth's ecclesiastical policy and show how she was guided in it by motives of political expediency.

VIII. Explain the aims and methods of the policy adopted by Mary on her arrival in Scotland, and show how far it was successful.

IX (*a*) Write a short account of the circumstances that led to the massacre of St Bartholomew

(*b*) What was 'the League'? Describe the state of political parties in France at the time of its formation

X With what objects did Don John of Austria undertake the administration of the Netherlands? Show fully how his plans were defeated

XI (*a*) Write a short account of the origin of the Society of Jesus, its organisation and the aims of its founders

(*b*) Write short notes on (1) the Diet of Augsburg, (2) the Union of Utrecht, (3) the battle of Ivry

M. A. DEGREE EXAMINATION, 1886.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M.

CHAUCER; SPENSER; MILTON; ADDISON.

I. Give the meaning of the following words:—bitake; buxomly; delyverly; engyned; flockmele; gabbe; gaping upright; gat-tothed; gaytres beryis; gye; mase; poraille; prow; sawceflem; shoop; tabard; throp; undern; vavasour.

II. Where did Chaucer get the materials for the Clerk's Tale? Into how many parts is the Clerk's Tale divided? Indicate briefly what part of the action is contained in each part. What is remarkable about the "Envoy" of the Clerk's Tale?

III. (*a*) Why is Spenser's poem called the Shepheard's Calender? What is the subject of the fifth division? What did Spenser imitate in the eleventh division, and what was his own opinion of it?

(*b*) Explain (i) "What gars ye greet?" (ii) "The Redde rose medled with the White yfere." (iii) "pierce her heart with poynt of worthy wight."

IV. Write etymological notes on the following words — Abrayde; Brouke; Felawe; Fether; Gere; Herbergage; Hiled; Jolyf; Nosethurles; Stiward; Tway; Wantoun.

V. Give a description of the Frankeleyn, after Chaucer.

VI. What dreams does Chaunteclere mention to prove that dreams are sent as ominous forewarnings of evil?

VII. (*a*) Specify the defects which Addison finds (i) in the sentiments and (ii) in the language of Paradise Lost.

(*b*) To what does Addison liken his paper on the faults and blemishes in Paradise Lost?

(*c*) What praise does Addison give to Milton's similes?

VIII. (*a*) What interrupts the combat between Gabriel and Satan in Book IV. of Paradise Lost? What comparison does Addison make thereon?

(*b*) How does Addison show Milton's consistency in the drawing of the characters of Moloch and Belial?

(*c*) What does Aristotle say of the Fable of an epic poem? What is Addison's comment on this?

(*d*) Under what four heads does Addison consider Book X. of Paradise Lost? Give a short summary of his remarks on the third head?

IX. What two kingdoms did Satan show to Our Lord in the Temptation? Why were they selected?

X. In what context do the following passages occur?

(*a*) "Those ancient whose resistless eloquence
Wielded at will that fierce democraty."

(*b*) "And utmost Indian isle Taprobane;"

(*c*) "A crown
Golden in show, is but a wreath of thorns."

XI. Is Paradise Regained complete?

XII. Explain the allusions in the following passages:—

(*a*) "And eke you Virgins, that on Parnasse dwell,
Whence floweth Helicon."

(*b*) "Urim and Thummim, those oracular gems;"

(*c*) "The shepheard of Ida that judged beauties Queene."

(*d*) "Sith the Saxon King
Never was Woolfe scene."

(*e*) "Antigonus and Old Hyrcanus, bound,
Maugre the Roman:"

(*f*) "And Philomel her song with tears doth steepe."

(*g*) "When Agrican, with all his northern powers,
Besieged Albracea, as romances tell,
The city of Gallaphrone;"

XIII. Explain the following passages:—

(*a*) "Be now namore agast ne yuel apayed;"

(*b*) "Wel couthe he in eschaunge scheeldes selle;"

(*c*) "So mot I the;"

(*d*) "Up roos oure host, and was our alther cok"

(*e*) "Seynd bacon, and sometyme an ey or tweye
For sche was as it were a maner deye;"

(*f*) "A peire of bedes gauded al with grene;"

(*g*) "A lymytour, a feel solempne man."

(*h*) "Of yeddinges he bar utterly the prys;"

(*i*) "His purchas was well better than his rente"

(*j*) "I saugh his selves purfiled at the honde
"With grys, and that the finest in the londe."

MONDAY, 18TH JANUARY, 2 TO 5 P M.

ENGLISH LANGUAGE AND LITERATURE.

The Merry Wives of Windsor; Henry VIII; the Winter's Tale; King Lear.

I (*a*) Was the *Merry Wives* written *before* or *after* 2 *Henry IV*? State the argument for either view.

(*b*) Point out the confusion of time in the scene in which Falstaff receives Mrs. Ford's second invitation.

II (*a*) Who describes *Henry VIII* as a 'Chronicle history with three and a half catastrophes'?
What is the half catastrophe?

(*b*) Note the deviations from the truth of history in this play as regards 1. Henry's character; 2. His motive for divorcing Queen Katherine; 3. The date of the commencement of his acquaintance with Anne Bullen; 4. Her feelings towards Katherine; 5. The date of Katherine's death; 6. Henry's feelings at Elizabeth's birth.

To what aim do these point?

What parts of the play are inconsistent with such an aim?

Suggest an explanation of the inconsistency.

(*c*) Enumerate the wrongful acts with which Wolsey is taxed by Norfolk, Suffolk, and Surrey.

III. (*a*) On what grounds did Horace Wolpole consider the *Winter's Tale* as a second part of *Henry VIII*?
Show the untenableness of the theory.

(*b*) Mention two points in which Shakespere varies his story from the *Pandosto*.

(*c*) How does Gervinus account for Hermione's sixteen years' concealment?

Give the substance of Coleridge's note on this point.

IV. (*a*) State in a few words what you consider to be the ethical or philosophical scope of *King Lear*.

(*b*) Ulrici says that the motives of Lear and Edgar are obscure. Explain his meaning.

(*c*) How does the story end (1) in Holinshed, (2) in Tate?

(*d*) What suggested to Shakespere the idea of making Lear mad?

(*e*) Lear has a presentiment of his madness, and his mind gives way *gradually*.

Show this by five quotations from his speeches?

(*f*) What is Shelley's estimate of *King Lear* as compared with the masterpieces of the Greek tragedy? And Swinburne's?

V. Has Shakespere in any of these plays borrowed anything from Marlowe or Sir Philip Sidney?

VI. Can you identify the speakers in the following dialogue.—

A. You will pay me the eight shillings I won of you at betting?

B. Base is the slave that pays—

A. That now I will have: that's the humour of it.

B. A noble shalt thou have, and present pay;
And liquor likewise shall I give to thee;
And friendship shall combine and brotherhood
Henry V.

VII. Apply the metrical tests to the following passages State your results, and the inferences they lead to.

(1) Pray you, arise,
My good and gracious Lord of Canterbury.
Come, you and I must walk a turn together;
I have news to tell you. Come, come, give me your hand.

Ah, my good lord, I grieve at what I speak,
And am right sorry to repeat what follows.
I have, and most unwillingly, of late
Heard many grievous, I do say, my lord,
Grievous complaints of you, which being consider'd,
Have moved us and our council, that you shall
This morning come before us.

(ii.) My high-blown pride
At length broke under me, and now has left me,
Weary and old with service, to the mercy
Of a rude stream that must for ever hide me.
Vain pomp and glory of this world, I hate ye!
I feel my heart new open'd. O how wretched
Is that poor man that hangs on princes' favours!
There is betwixt that smile we would aspire to,
That sweet aspect of princes, and their ruin,
More pangs and fears than wars or women have—

(*a*) Scan (i) lines 4 and 9; and (ii) line 9.

VIII. Explain:—

1 *The pin and the web*; 2. *Court holy-water*; 3. *I'll sauce them*; 4. *A fit or two of the face*; 5. *Seeming so* (i.e. stupified) *in skill*; 6 *Snuffs and packings*; 7. *I'll make a shaft or bolt on't*; 8 *Give your friend some touch of your late business*; 9. *Of a queasy question*; 10. *Strength of limit.*

IX. By whom and in what connection are the following quotations spoken?

1. Prosperity is the very bond of love,
   Whose fresh complexion and whose heart together
   affliction alters.
2. You would spare your spoons.
3. That's meat and drink to me now.
4. Every inch a king.
5. Nature is made better by no mean.
   But nature makes that mean.
6. 'Tis old but true, still swine eat all the draff.
7. And I will go to bed at noon.

8. He was a fool,
For he would needs be virtuous

(*a*) Quote the reply to quotation (1)

X. Annotate —

1 The salt fish is an old coat
2 If I had a monopoly out, they would have part on't
3 Wind me into him I pray you
4. This 's a good block
5 These knights will hack
6 Our means secure us, and our mere defects
Prove our commodities

XI In what archaic or peculiar senses does Shakespere use the words:—

Require, cheater, recourse, diffused, clear, repeal, able, allow, value, old, take, fall.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P.M.

ENGLISH LANGUAGE AND LITERATURE

Hallam's *Literature of Europe*, and de Quincey's *Rhetoric*

I What four circumstances does Hallam point out as tending to arouse Europe from indolence and to fix its attention on Literature at the beginning of the 12th Century?

II (*a*) At the end of the 16th Century "the simple proposition that men for holding or declaring heterodox opinions in religion ought not to be burned alive, or otherwise put to death, was itself little else than a sort of heterodoxy" Explain this statement, and name the chief writers for and against toleration at that period, and the arguments used on each side

(*b*) What was the cause and what the effect of the bull, in 1590, of Pius V relieving English Roman Catholics from their allegiance to Queen Elizabeth?

(*c*) What were the four articles formulated by Bossuet as part of the liberties of the Gallican Church?

III. (*a*) Of which of Shakspere's Plays does Hallam say:—

(1) "None perhaps has fewer blemishes, or is from beginning to end in so perfect keeping."

(2) "No Play of Shakspere's is more frequently represented, or honoured with more tears."

(3) "It is generally esteemed the best of Shakspere's Comedies."

(4) "The work in which he has best displayed English manners."

(*b*) "We see Shakspere ... in a reflex image from the objectivity in which he was manifested; he is Falstaff and Mercutio, and Malvolio and Jaques and Portia and Lear and Othello." In what Plays do the first six characters occur?

(*c*) Name six of the principal critics or commentators on Shakspere, and briefly specify the service they have severally done.

IV (*a*) In what respect is the restoration of polite letters due to Petrarch?

(*b*) In whose works did Dryden believe that "the English Language had arrived at its highest perfection"?

(*c*) What ode does Hallam regard as "perhaps the finest in the English Language"?

(*d*) Where and in what words has Dryden given the highest praise to *Paradise Lost*?

(*e*) 'Garth's *Dispensary* indicates a transitional state in our versification.'—Show this.

(*f*) The second edition of Dryden's *Essay on Dramatic Poetry* shows the care which the author took with his own style, and the change which was gradually working in the language. Give an instance of each.

(*g*) What was the origin of the *Battle of the Books*?

V (*a*) Name four of the chief writers in Speculative Philosophy from 1650 to 1700 and the principal work of each.

(*b*) Who were the chief writers on Political Economy in England in the end of the 17th Century; and what were the views advanced regarding the fixing the rate of interest and of the value of silver?

(*c*) Write a brief note on *Areopagitica*, *Microcosmographia*, *the Anatomy of Melancholy*, *Timber*, *Dodona's Grove*. [Particulars required—Author, date, topic, style].

VI. (*a*) How did the French Academy originate, and what were its objects and constitution?

(*b*) What were—'the trivium,' 'quadrivium,' 'glosses,' 'apparatus,' 'Capa y Espada,' 'euphuism,' 'adversaria,' 'ana,' 'della crusca'?

VII (*a*) Who was each of the following, and how celebrated in literature, arts, &c.:—Bembo, Budæus, Sir John Cheke, Palæstrina, John Sturm, Buchanan, Pascal, Puffendorf, Rochefoucault, Boileau, Bayle, Mlle. de Scuderi, and Mme. de Sevigne? (Answer briefly.)

(*b*) Name the author and give the date of the appearance of—*the Divine Comedy*, *Pastor Fido*, *Ralph Roister Doyster*, *The Cid*, *Icon Basilike*, *Don Quixote*, *Ductor Dubitantium*, *Oceana*, *Alexander's Feast*, *Tartuffe*, *and Venice Preserved*.

VIII. Explain the allusions in:—

(1) "*His* angry allusion to *Shakspere's plagiarism* is best explained by supposing that he was himself concerned in the 2nd and 3rd Parts of *Henry VI.*"

(2) "I do not know of any of his contemporaries who could have written the *scene in the Temple Garden*."

(3) "It is from the *Theban lyre* which they boast to strike, it is from the *fountain of Dirce* that they draw their inspiration, and their allusions are as frequent in their verse as those to *Valclusa* and the *Sorga* in the followers of ..... "

(4) Johnson has selected the Elegy on Crashaw as the finest of *his* works. It begins with *a very beautiful couplet*, but I confess with little else, to my taste, of much value."

(5) "*Father Dominic* is very amusing, and has been copied[4] very freely by succeeding dramatists especially in the *Duenna*."

(6) "Partly from *this cause*, and partly because they wrote in an unfavourable language, the Greek Fathers are, one and all, *Birmingham rhetoricians*."

(7) "As it has happened to Milton sometimes to give us poetry for rhetoric, in *one instance* he has unfortunately given us rhetoric for poetry."

(8) "Light, before that theory had been *refuted by the Satellites of Jupiter*, was held not to be propagated in time."

IX. Briefly discuss the question "that eloquence is a rarer growth of modern than of ancient civil polity, even in those countries which have the advantage of free institutions."

X. Give deQuincey's definition of Eloquence and of Rhetoric.

XI. What two instances (one from Shakspere and the other from Hooker) does he cite of the fine effect of the arrangement of the sentence—the concluding verb placed in a striking position?

XII. Who, according to deQuincey, were the five greatest English rhetoricians in the Seventeenth Century?

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

ENGLISH LANGUAGE AND LITERATURE.

(Tennyson's 'In Memoriam,'—Wordsworth's 'Laodamia,'—'The White Doe,'—Carlyle's 'Past and Present.')

I. "Wordsworth, the most determined enemy of false classicism, was in much of his writing truly classical." Examine and amplify the above statement. What is meant by classicism, and what is its antonym?

II. State what you know of the model which Wordsworth is said to have imitated in the White Doe. What is its literary importance?

III. Explain by paraphrase:—

(*A*) If e'er when faith had fall'n asleep,
I heard a voice "believe no more"
And heard an ever-breaking shore
That tumbled in the sodless deep;

A warmth within the breast would melt
The freezing reason's colder part,
And like a man in wrath the heart
Stood up and answer'd "I have felt."

(*B*) Half grown as yet, a child, and vain—
She cannot fight the fear of death.
What is she, cut from love and faith,
But some wild Pallas from the brain
Of Demons? Fiery-hot to burst
All barriers in her onward race
For power.

IV. (*A*) ....." whose light-blue eyes
Are tender over drowning flies"

(*B*) " With blasts that blow the poplar white
And lash with storm the streaming pane."

Of what peculiarities of Tennyson's style are the above passages characteristic?

V. Explain briefly the meaning of any four of the following passages, with short critical notes where necessary.

(*A*) There where the long street roars, hath been
The stillness of the central sea.

(*B*) The red fool-fury of the Seine
Should pile her barricades with dead.

(*C*) For fear divine Philosophy
Should push beyond her mark, and be
Procuress to the Lords of Hell.

(*D*) That men may rise on stepping-stones
Of their dead selves to higher things.

(*E*) Tho' Nature, red in tooth and claw
With ravine, shriek'd against his creed.

(*F*) .....Arise and fly
The reeling Faun, the sensual feast;
Move upward, working out the beast,
And let the ape and tiger die.

(*G*) The brute earth lightens to the sky
And the great Æon sinks in blood.

VI. Contrast Wordsworth's earlier with his later style To which would you refer Loadamia? Give reasons for your answer.

VII. "Are God and Nature then at strife
That Nature lends such evil dreams?
So careful of the type she seems,
So careless of the single life."

What is Tennyson's answer to the difficulty suggested in the above lines?

VIII. Show that you know the meaning of the following:—

(*a*) Five point Chartism.
(*b*) Laissez Faire.
(*c*) Cellerarius.
(*d*) Dilettantism.
(*e*) Sansculottism.

IX. What does Carlyle say of the duties of the modern employer of labour?

X. Contrast, as described by Carlyle, the condition of the "Saxon thrall" with that of the modern workman.

XI. Explain briefly any four of the following passages, with short notes on the italicised words:—

(*a*) The proper epic of the world is not now "Arms and the Man," how much less "*shirt-frills and the Man*:" no, it is now "Tools and the Man."

(*b*) *Jacobinism* unfolded into *Saint-Simonism* bodes innumerable blessed things, but the thing itself might draw tears from a Stoic!

(*c*) *Stylitisms, eremite fanaticisms* and fakeerisms; spasmodic agonistic posture-makings, sad narrow cramped, morbid, if for ever noble wrestlings. All this is not a thing desirable to me. It is a thing the world has done once, when its beard was not grown as now.

(*d*) The Last Partridge of England, of an England where millions of men can get no corn to eat, will be shot and ended.

(*e*) In truth, could your divine Anselm, your divine Pope Gregory have had their way, the results had been very notable. Our western world had all become a European Thibet, with one great Lama sitting at Rome.

(*f*) What is to become of our invaluable Cotton Trade? The humanity of England answered steadfastly: "Deliver me these rickety perishing souls of infants, and let your cotton trade take its chance."

(*g*) The Feudal Baron, much more—how could he subsist with mere temporary mercenaries round him, at six pence a day; ready to go over to the other side, if seven pence were offered?

(*h*) Liberty, I am told, is a divine thing. Liberty, when it becomes the "Liberty to die by starvation" is not so divine.

XII What are Carlyle's views on the question of the limits of State interference with the liberty of the individual?

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

ENGLISH PROSE COMPOSITION

I. Write an essay on the effect of foreign conquest upon the language of a people as illustrated by the various conquests of England.

II. Write:—

A Critique on any standard English Prose work not being a text-book prescribed for this examination.

or

An Essay on either "Representative Government"

or

"The first step to self-knowledge is self-distrust."

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

SANSKRIT TRANSLATION.

I. Translate into Sanskrit Anushtup metre:

When Adam thus to Eve: "Fair consort, the hour
Of night, and all things now retired to rest,
Mind us of like repose; since God hath set
Labour and rest, as day and night, to men
Successive; and the timely dew of sleep,

Now falling with soft slumb'rous weight, inclines
Our eyelids: other creatures all day long
Rove idle, unemploy'd, and less need rest;
Man hath his daily work of body or mind
Appointed, which declares his dignity,
And the regard of Heaven on all his ways;
While other animals unactive range,
And of their doings God takes no account.
To-morrow, e're fresh morning streak the east
With first approach of light, we must be risen,
And at our pleasant labour, to reform
Yon flowery arbours; yonder alleys green,
Our walk at noon, with branches overgrown,
That mock our scant manuring, and require
More hands than ours to lop their wanton growth:
Those blossoms also, and those dropping gums,
That lie bestrewn, unsightly and unsmooth,
Ask riddance, if we mean to tread with ease;
Meanwhile, as nature wills, night bids us rest."
To whom thus Eve, with perfect beauty 'dorn'd:
"My author and disposer, what thou bidd'st
Unargued I obey: so God ordains;
God is thy law, thou mine: to know no more
Is woman's happiest knowledge and her praise."

(MILTON)

THURSDAY, 21st JANUARY, 10 A.M. TO 1 P.M.

VEDANTASARA.

I. (*a*) Explain the aim of the Vedânta; who is called upon to study it? what is required of its student?

(*b*) What is the source of the Vedânta, and what is the difference between exoteric and esoteric Vedânta?

(*c*) Discuss the position of Brahman as cosmical principle and creator of the Cosmos.

(*d*) Explain, according to Vedântic principles, the origin of the soul and its position towards God (Īsvara) and the body.

II. Give an explanatory translation of the following sentences:—

(a) अनयावृतस्यात्मनः कर्तृत्वभोक्तृत्वसुखित्वदुःखित्वादिसंसारसम्भावनापि भवति यथाज्ञानेनावृतायांरज्ज्वां सर्पत्वसंभावना ।

(b) एते पुनराकाशादिगतसात्त्विकांशेभ्यो मिलितेभ्य उत्पद्येते। एतेषां प्रकाशात्मकत्वात्सात्त्विकांशकार्यत्वम् ।

(c) तदानीमाकाशे शब्दोऽभिव्यज्यते वायौ शब्दस्पर्शौ अग्नौ शब्दस्पर्शरूपाणि अप्सु शब्दस्पर्शरूपरसाःपृथिव्यां शब्दस्पर्शरूपरसगन्धाश्च।

(d) सम्बन्धत्रयं नाम पदयोः सामानाधिकरण्यं पदार्थयोर्विशेषणविशेष्यभावः प्रत्यगात्मपदार्थयोर्लक्ष्यलक्षणभावश्चेति । यदुक्तं । सामानाधिकरण्यञ्च विशेषणविशेष्यता। लक्ष्यलक्षणसम्बन्धः पदार्थप्रत्यगात्मनामिति ।

(e) तत्र नीलपदार्थनीलगुणस्य उत्पलपदार्थोत्पलद्रव्यस्य च शुक्लपटादिव्यावर्त्तकतयाऽन्योन्यविशेषणविशेष्यरूपसंसर्गस्य अन्यतरविशिष्टस्यान्यतरस्य वा तदैक्यस्य वाक्यार्थत्वा-

ङ्गीकरणे प्रमाणान्तरविरोधाभावात् वाक्यार्थः सङ्गच्छते ।

(*f*) बुद्धाद्वैतसतत्त्वस्य यथेष्टाचरणंयदि । प्रुनां तत्त्वदृशाञ्चैव कोभेदोऽप्रुचिभक्षणे । ब्रह्मविच्चन्नथामुक्त्वा स आत्मज्ञो न चेतर इति ।

III. (*a*) What is काम्य, निषिद्ध, नित्य, नैमित्तिक, साधन, शम, दम, विशुद्धसत्त्वप्रधानसमष्व्युपहितचैतन्यं, मलिनसत्त्वप्रधानव्यष्व्युपहितचैतन्यं, सम्बन्धत्रयं, विघ्नचतुष्टयं?

(*b*) How can आवरणविक्षेपशक्तिद्वयवदज्ञानोपहितचैतन्यं be regarded as निमित्तं and how as उपधानं?

(*c*) What do effect नाग, कूर्म, कृकर, देवदत्त and धनञ्जय?

(*d*) What is the difference between सविकल्पक and निर्विकल्पक?

THURSDAY, 21ST JANUARY, 2 TO 5 P M

SANSKRIT. ŚĀKUNTALA, MAHĀVĪRACARITRA, MRICCHAKATIKĀ.

I. (*a*) To whom is the Indian drama ascribed? Mention some of the more important treatises on dramatic poetry. Discuss the question as to its probable origin

(*b*) Into how many classes do native authors divide dramatic compositions? Give the name of these classes and their principal subdivisions.

(*c*) Which are the prominent differences you observe in the plays of Śūdraka, Kālidāsa and Bhavabhūti? State briefly what you know about them, and at what period they are regarded to have lived.

II. (*a*) Explain the Alankāra and Vyangya of the following —

उत्कण्ठितस्य हृदयानुगुणा वयस्या संकेतके चिर-
यति प्रवरो विनोदः ।
संस्थापना प्रियतमाविरहातुराणां रक्तस्य राग
परिवृद्धिकरः प्रमोदः ॥
मूढे निरन्तरपयोधरया मयैव कान्तः सहाभिर-
मते यदि किन्नवाच ।
मां गर्जितैरिति मुहुर्विनिवारयन्ती मार्गं रुणद्धि
कुपितेव निशा सपत्नी ॥
चित्ते निवेश्य परिकल्पितसर्वयोगान् रूपोच्चयेन
विधिना विहिता कृशाङ्गी ।

स्त्रीरत्नसृष्टिरपरा प्रतिभाति सामे धातुर्विभु-
त्वमनुचिन्त्य वपुश्च तस्याः ॥

अस्मान् साधु विचिन्त्य संयमधनानुच्चैः कुलश्चा-
त्मनस्त्वय्यस्याः कथमप्यबान्धवकृतां स्नेहप्र-
वृत्तिञ्च ताम् ।

सामान्यप्रतिपत्तिपूर्वकमियं दारेषु दृश्या त्वया
भाग्याधीनमतः परं नखलु तत् स्त्रीबन्धुभि-
र्याच्यते ॥

प्राणोत्क्रीर्णो मणिरिव घनाम्भोदमुक्तो विवस्वान्
निः कोशोऽसिर्झटिति विगलत्कञ्चुकः पन्न-
गेन्द्रः ।

दीव्यत्युच्चैर्लघुरघुपतिः किन्न वा स्यात् किमन्यत्
दिव्यौषध्या जयति महिमा कोऽप्यचिन्त्यानु-
भावः ॥

(b) Quote in full the Ślokas beginning with सङ्गंनेव-
हीत्यादि, एतैरेव यदा गजेन्द्रेत्यादि,
सत्त्वभ्रंश विषादिभिरित्यादि, क्षमायाः स
दृत्यादि, पृष्टा जनेनेत्यादि and आलक्ष्य-
दन्तेत्यादि.

(c) Give the meaning of ज्योतिष्मती, भावनचतुष्क, योगाचारन्याय, व्यायतत्त्व, व्यसन, निर्वापयिता, विच्छित्ति, पर्यंकग्रन्थि, प्रत्यादिष्ट, नानक, अनुक्रोश.

(d) How are uttered जनान्तिकं, अपवार्य and एवमिव?

(e) What are प्रकार, विट, अंकास्य, अंकावतार, लास्य, ताण्डव, चिगत, अवलगित.

(f) Define वृत्त्यनुप्रास, दीपकालंकार, अविवक्षितवाच्यध्वनि, पाञ्चालीरीति, कैशिकीवृत्ति, समाप्तपुनरादानदोष, ओजोगुण, धीरोदात्तनायक.

III. (a) Explain the following Sūtras:—

सर्वादेर्जस एत्वं, भुवो होऊवौ.

(b) Turn into Sanskrit:

(1) प्रकारः । जे चुम्बिदे अम्बिकमाकुकेहिं गदे ण देवाणवि जे पणामं ।
ग्रे पाडिदे पादतलेण मुण्डे वणे शिग्घालेण जधा मुदङ्गे ॥

अले थावलआ चेडा कहिं तुए एआ आमाआदिदा ।

चेटः । भट्टके गामआअलेहिं लुद्धे लाआमग्गे तदो चालुद्दत्तआ लुक्खवाडिआए पवहणं थाविअ तहिं ओदलिअ जाव चक्कवट्टिअं कलेमि ताव एआ पवहणविपज्जाएण दूह आलूढेत्ति तक्केमि ।

(2) धीव। एक्कअिं दिआअेमए लोहिदमच्छके पाविदे तदो खण्डआो कप्पिदे जाव तआ उद्दलअन्तले पेक्खामि दाव एआे महालआणभाअुले अंगुलीआए पेक्खिदे पच्चादूध विक्कआत्थं दंआअन्ते ज्जेव गहिदे भावमिआेहिं एत्तिके दाव एदआ आगमे अध मं मालेध कुट्टेध वा ।

(c) Turn into Prākrit:

चेटः । पादोत्फालचालितानां नूपुराणामिवान्तःशब्दः भाराक्रान्तस्य प्रवहणं तथा तर्कयामिसाम्प्रतमार्य्यया आरूढयाभवितव्यम् तद्गच्छामि यातं गावौ यातम् ।

प्रविश्य वीरकः । अरे रे अरे जयजयमाणचन्दनकमङ्गलपुष्पभद्रप्रमुखाः ॥

किं स्थ विश्रब्धाः यः स गोपालदारको रुद्धः ।
भित्त्वा समं व्रजति नरपतिहृदयञ्च बन्धनञ्चापि ॥
अरे पुरस्तात् प्रतोलीद्वारे तिष्ठत्वं पश्चिमेत्वमत्व-
मपि दक्षिणेत्वमपि उत्तरे ।
योऽपि एष प्राकरखण्डः एतमभिरुह्य चन्दनेन समं
गत्वा अवलोकयामि एहि चन्दनक एहि द्रुत-
स्तावत् ।

(*d*) According to what rule are the Prākrit dialects used in the dramas, and what is the general principle according to which a dramatic poet assigns a peculiar dialect to each person?

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

SANSKRIT: RIG-VĒDA, 1, 25—36.

I. (*a*) Paraphrase into modern Sanskrit:—

अश्वं न त्वा वारवंतं वंदध्या अग्निं नमोभिः । सम्रा-
जं तमध्वराणां ॥ १ ॥

सघा नः सूनुः शवसा पृथुप्रगामा सुशेवः । मीढ्वाँ
अस्माकं बभूयात् ॥ २ ॥

स नो दूराच्चासाच्च नि मर्त्यादघायोः । पाहि सद-
मिद्विश्वायुः ॥ ३ ॥

इममूषुत्वमस्माकं सनिं गायत्रं नव्यांसं । अग्ने देवेषु प्र वोचः ॥ ४ ॥

आ नो भज परमेष्वा वाजेषु मध्यमेषु । शिक्षा वस्वो अंतमस्य ॥ ५ ॥

विभक्तासि चित्रभानो सिंधोरूर्मा उपाक आ । सद्यो दाशुषे क्षरसि ॥ ६ ॥

यमग्ने पृत्सु मर्त्यमवा वाजेषु यं जुनाः स यंता शश्वतीरिषः ॥ ७ ॥

नकिरस्य सहंत्य पर्येता कयस्य चित् । वाजो अस्ति श्रवाय्यः ॥ ८ ॥

स वाजं विश्वचर्षणिरर्वद्भिरस्तु तरुता । विप्रेभिरस्तु सनिता ॥ ९ ॥

जराबोध तद्विविड्ढि विशेविशे यज्ञियाय । स्तोमं रुद्राय दृशीकं ॥ १० ॥

स नो महाँ अनिमानो धूमकेतुः पुरश्चंद्रः । धिये वाजाय हिन्वतु ॥ ११ ॥

स रेवाँ इव विश्पतिर्दैव्यः केतुः शृणोतु नः ।
उक्थैरग्निर्बृहद्भानुः ॥ १२ ॥

नमो महद्भ्यो नमो अर्भकेभ्यो नमो युवभ्यो नम
आशिनेभ्यः । यजाम देवान्यदि शक्नवाम मा
ज्यायसः शंसमा वृक्षि देवाः ॥ १३ ॥

(*b*) Explain the above underlined and the following expressions according to Grammar and meaning:—

मिनीमसि, द्रुक्षाणः, दिवित्मता, रिशादसः, जल्गुलः अपच्यव, तुवीमघ, कुंडृणाची, गिर्वाहः, योगेयोगे, तुविप्रतिः, विश्वनापसः, अदाभ्य, चिकद्रुकाः, तादीत्ना, वावृधाति, नवग्वाः, हिन्वेव, आहावाः, अभीवृतं, गभीरवेपाः.

(*c*) Write the 13th verse in the Padapāṭha.

(*d*) Point out the peculiar Vedic expressions occurring in the above passage, and mention the more important peculiarities from other parts of your text.

II. (*a*) Write short notes about Śunaḥśepa, Hiraṇyastūpa, Kaṇva; also about Varuṇa, Agni, Indra, Aśvinau, and Uṣas; and state how Yāska classifies the Vedic deities.

(*b*) Accentuate and scan the following, and name the metres in which they are written:—

मा नो वधाय हत्नव जिहीळानस्य रारधः ।
मा हृणानस्य मन्यवे ॥

सर्वं परिक्रोशं जहि जम्भया कृकदाश्वं । आ तू न
इंद्र शंसय गोष्वश्वेषु शुभ्रिषु सहस्रेषु तुवीमघ ॥

(*c*) Explain the verbal formations in the above printed hymn, and mention how far they differ from the Bhāshā forms sanctioned by Pāṇini's Grammar.

III. (*a*) Give a short account of the origin of the Veda.

(*b*) Describe some, essential points respecting the Vedic worship.

FRIDAY, 22ND JANUARY, 2 TO 5 P M.

SANSKRIT: MANU II, VII, AND VIII; DAŚAKUMĀRACARITRA AND MĒGHADUTA.

I. (*a*) Define the difference between Śruti and Smṛiti; between Śrautasūtra and Gṛihyasūtra; and between Srautaprayoga, Smārtaprayoga and Kalpaprayoga.

(*b*) Enumerate and define the different subdivisions of the Dharmaśāstra.

(*c*) What is the date of the Mānavadharmaśāstra; state briefly what you know of its recension, and enumerate its principal commentators.

II. (*a*) Give the meaning of, and the allusions contained in the following Ślokas:—

समीक्ष्य स धृतः सम्यक् सर्वा रक्षयति प्रजाः ।
असमीक्ष्य प्रणीतस्तु विनाशयति सर्वतः ॥
राज्ञश्च दण्डरूद्वारमित्येषा वैदिकी श्रुतिः ।
राज्ञा च सर्वयोधेभ्यो दातव्यमपृथग्जितं ॥
एवं विजयमानस्य येऽस्य स्युः परिपन्थिनः ।
तानानयेद्वशं सर्वान् सामादिभिरुपक्रमैः ॥

समानयानकर्मा च विपरीतस्तथैव च ।
तदात्वायतिसंयुक्तः सन्धिर्ज्ञेयो द्विलक्षणः ॥
नोत्पादयेत् स्वयं कार्यं राजा नाप्तस्यपूरुषः ।
न च प्रापितमन्येन ग्रसेदर्थं कथञ्चन ॥
लोभात् सहस्रं दण्ड्यस्तु मोहात् पूर्वं तु साहसं ।
भयाद्वौ मध्यमौ दण्डौ मैत्रात् पूर्वं चतुर्गुणं ॥

(*b*) Explain the following expressions —

ब्रह्मर्षिदेश; ब्राह्म,-दैव,- and पित्र्य-तीर्थ; निवीत उपांशु; आचार्य, उपाध्याय, गुरु; अष्टादशपदानि.

(*c*) What is the length of the staff prescribed to different persons? How does water purify men of the different castes? How should the Gāyatrī be repeated, and what is its effect? How does time reflect on the equality between different persons? Who is not to be wedded as a wife? How are the nuptial ceremonials to be observed for persons who marry in their own class and who take wives from another class? What witnesses should creditors and others produce before a judge? What is the limit of interest which can be received on loans of different kinds? State shortly the deposit laws.

III. (*a*) Give the Alankāras and Vyangyas of

आपृच्छस्व प्रियसखममुं तुङ्गमालिङ्ग्य शैलं वन्द्यैः
पुंसां रघुपतिपदैरंकितं मेखलासु ।
काले काले भवति भवतो यस्समागमेत्य स्नेह
व्यक्तिश्चिरविरहजं मुञ्चतो बाष्पमुष्णम् ॥

तस्माद्गच्छेरनुकनखलं शैलराजावतीर्णाम्
जह्नोः कन्यां सगरतनयस्वर्गसोपानपङ्क्तिम् ।
गौरीवक्त्रभ्रुकुटिरचनां या विहस्येव फेनैः
शम्भोः केशग्रहणमकरोदिन्दुलग्नोर्मिहस्ता ॥
गत्वा सद्यः कलभतनुतां शीघ्रसञ्चारहेतोः
क्रीडाशैले प्रथमकथिते रम्यसानौ निषण्णः ।
अर्हस्यन्तर्भवनपतितां कर्तुमल्पाल्पभासं
खद्योतालीविलसितनिभां विद्युदुन्मेषदृष्टिम् ॥
शापान्तो मे भुजगशयनादुत्थिते शार्ङ्गपाणौ
शेषान् मासान् गमय चतुरो लोचने मीलयित्वा ।
पश्चादावां विरहगणितं तं तमात्माभिलाषम्
निर्वेक्ष्यावः परिणतशरच्चन्द्रिकासु क्षपासु ॥

(b) Give in a short Sanskrit narrative the plot of the Mēghadūta.

IV (a) Give the Śabdālankāra, Arthālankāra and Vyangya of

अथैकदा वामदेवः सकलकलाकुशलेन कुसुमसायकसंशयितसौदर्येण कल्पितसौन्दर्येण साहसापहसितकुमारेण सुकुमारेण जयध्वजातपवारणकलशांकितकरेण कुमारनिकरेण परिवेष्टितं ।

राजहंसकुलतिलकवाञ्छया केलिवने मदन्तिकमागतं भवन्तमकाण्ड एव विसृज्य नमया समुचितमिति जनन्यनुगमनं क्रियते तदनेन भवन्मनोऽनुरागोऽन्यथा मा भूदिति ।

नृत्योत्थिता च सा सिद्धिलाभलोभिनी किं विलासात् किमभिलाषात् किमकस्मादेव वा न जाने अस्मन्मां सखीभिरन्यनुपलक्षितेनापाङ्गचितेन सविभ्रमप्रेरितभ्रूलतमभिवीक्ष्य सापदेशञ्च किञ्चिदाविष्कृतदशनच्छदकंस्मित्वा लोकलोचनमानसानुयाता प्रातिष्ठत ।

(b) Who is the father of Sumati, Satyavarma, Sumantra, Sumitra, Susruta and Ratnōdbhava? Who are the fathers of the Dasakumaras?

(c) Explain in Sanskrit the meaning of दैवतन्त्र, संख्य, असंख्य, दाक्ष्य, मनुष्यमात्र, कल्प, उपशल्य, नियुद्ध, आनाय, नैष्ठिक, वासु, परिबर्ह, शुल्क, नीवि, वैजन्य, तन्त्रावाप, चिकित्सक कालशेय, प्रतिश्रयित, अर्घ, उपस्कर, वरिवस्यमान, अलिन्द, पिचुमन्द, सुशीम, निर्याण, खोदवसित.

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M.

SANSKRIT · COMPOSITION.

The choice of the subject is left to the Candidate.

I. Vedic worship contrasted with Puranic worship.

II. The position of women in Ancient India.

III. Kalidāsa and Bhavabhūti compared as dramatists.

SATURDAY: 23RD JANUARY, 2 TO 5 P.M.

SANSKRIT: TRANSLATION.

I. Translate the following into English :—

(a) निषन्दीक्षतपद्मषण्डनयनंनष्टचपावासरं
विद्युद्भिः क्षणनष्टदृष्टतिमिरंप्रच्छादिता-
शामुखम् ।
निश्चेष्टंखपितीवसंप्रतिपयोधारागृहान्तर्गतं
स्फीताम्भोधरधामनैकजलदच्छन्नापिधा-
नञ्जगत् ॥

(b) चण्डालो । — ओशलध अज्जा ! ओशलध । एसे
अज्जचालुदत्ते ।
दिण्णकलवीलदामेगच्छिदेअन्धेहिवज्झपुलि-
सेहिं ।

दीवेव्वमन्दणेहेथीअंथीअंखअंजादि ॥

चारुदत्तः — (सविषादम्)

नयनसलिलसिक्तं पांसुरूक्षीकृताङ्गं
पिष्टवनसुमनोभिर्वेष्टितंमेशरीरम् ।
विरसमिहरटन्तो रक्तगन्धानुलिप्त
बलिमिव परिभोक्तुं वायसास्तर्कयन्ति ॥

चण्डालौ — ओअलध अज्जा ! ओअलध

किंपेक्खधक्किज्जन्तं अप्पुलिअंकालपलअु-
धालाहिं ।
अुअणअउणाधिवासं अज्जणपुलिअदुमंए-
दम् ॥

आअच्छले चालुदत्ता ! आअच्छ

चारुदत्तः — पुरुषभाग्यानामचिन्त्याः खलुव्या-
पाराः, यदहमीदृशीन्दशामनुप्राप्तः

सर्वगात्रेषुविन्यस्तै रक्तचन्दनहस्तकैः ।
पिष्टचूर्णावकीर्णश्च पुरुषोऽहं मधूकृतः ॥

(अग्रतोनिरूप्य) अहो ! तारतम्यंनराणाम् (सक-
रुणम्)

अमीहिदृष्ट्वामदुपेतमेतन्मर्त्यंधिगस्त्वित्युप-
जातबाष्पाः ।
अशक्नुवन्तःपरिरक्षितुंमांस्वर्गेलभस्वेतिवद-
न्तिपौराः ॥

(c) विदूषकः(विचिन्त्य) भोहदोम्हि एदस्स मिअआसो-
लस्स रण्णो वअस्सभावेण णिव्विण्णो अअंमिओ
अअंवराहो अअंसद्दूलोत्तिमज्झन्दिणेबिगिम्हे-
विरलपादवच्छाआसुं वणराइमुं आहिण्डिअ,
पत्तसंकरकसाअविरसाइं उण्णकडुआइंपिज्जन्ति
गिरिणईसलिलाइं अणिअदवेलञ्च उण्णोण्ण-
मंसभूइट्ठं भुञ्जीअदि, तुरअगआणाञ्चसद्देण-
रत्तिम्पि मेणत्थिपकामसुइदव्वं, महन्तेज्जेव-
पच्चूसे दासीए पुत्तेहिंसाउणिअलुद्धेहिं कण्णो-
बघादिणा वणगमणकोलाहलेण पडिबोधि-
दोम्हि, एत्तिकेणबिमेपीडाणसंवुत्ता, जदो
अअं गण्डस्सउवरिविप्फोडओ संवुत्तो, तेण-
हिकिल अम्हेसुं अवहीणेसुं तत्थभअदामिआ-
णुसारिणा अस्समपदं पविट्ठेण ममअधण्ण-
दाए सउन्तलाणाम' काबितबस्सिकण्णआ-

दिट्ठा, तंपेक्खिअअम्हपदंणअरगमणस्सकधम्पिण-
करेदि, एवं ज्जेव्वचिन्तअन्तस्समेपहादाअ-
च्छिमुंरअणी, कागदूं, जावणं किदआरपरि-
ग्गहंपिअवअस्संपेक्खामि (परिक्रम्यावलोक्यच)
एसो बाणासणहत्थो हिअअणिहिदपिअजणो
वणपुप्फमालाहारोदूदोज्जेवआअच्छदिपिअ -
वअस्सो, भोदु अङ्गभङ्गविअलोभविअचिट्ठि-
स्सं एवम्पिणामविस्सामंलहेअं ।

(d) व्यतिषजतिपदार्थानान्तरःकोऽपिहेतु-
र्नखलुबहिरुपाधीन् प्रीतयःसंश्रयन्ते ।
विकसतिहिपतङ्गस्योदयेपुण्डरिक-
न्द्रवतिचहिमरश्मावुद्यतेचन्द्रकान्तः ॥

(e) स्वस्तिमहेन्द्रद्वीपात्परशुरामो लंकायाममात्य-
मारुत्यवन्तमभ्यर्हयति अत्रैवपरममाहेश्वरंलंकेश्वरमभि-
नन्द्य ब्रवीति, विदितमेतद्वोयदस्माभिर्दण्डकारण्यतीर्थो-
पाश्रयेभ्यस्तपोधनेभ्यः प्रतिज्ञातमभयम् । तच्चविराध-
दनुकबन्धप्रभृतयःकेचिभिचरन्तीतिश्रुतम् । तत्तान्प्र-
तिषिध्यसदृत्तिमस्मद्धिताच्च माहेश्वरप्रीतिमनुरुध्यन्तां
भवन्तः ॥

(f) दूरेवर्त्वंतिष्ठद्भुतमहमहोभिःकतिपयैः
समागन्ताकान्तेमृदुरसिनचायाससहना ।
मृदुत्वंमेहेतुःसुभगभवतागन्तुमधिकं
नमद्वीसोढायद्विरहजतमायासमसमम् ॥

(g) कोऽत्रभूमिवल्लयेजनान्मुधा तापयन्सुचिरमे-
तिसम्य दम् ।
वेदयन्निवदिनेनभानुमानाससाद चरमाचलं,-
ततः ॥

(h) क्षिपश्चिभ्रुकंदृषदंशकरदने मृगमर्पयसिमृगा-
दनवदने ।
वितरसितुरगंमहिषविषाणे विदधत्तेतोभोग -
वितानं ॥

(i) अरुन्तुदंपरुषंतीक्ष्णवाचं वाक्कण्टकैर्वितुदन्तं-
मनुष्यान् ।
विद्यादलक्ष्मीकतमज्जनानां मुखेनिबद्धांनिर्ऋ-
तिंवहन्तम् ॥

(j) एकोहमस्मीतिचमन्यसेत्वं नबुध्यसेयंवेत्सिमु-
निंपुराणम् ।

योवेदिताकर्मणःपापकस्य तस्यान्तिकेत्वंवृजि-
नंकरोषि ॥

(k) सहायबन्धनाह्यर्थाः सहायाश्चार्थबन्धनाः । -
अन्योन्यबन्धनावेतौ विनान्योऽन्यंनसिध्यतः ॥

(l) यःश्रीखण्डतमालपत्रतिदिशः प्राच्याः स्मर-
क्ष्मापतेः
पाण्डुच्छत्रति दन्तपत्रतिवियल्लक्ष्मीकुरङ्गी-
दृशः ।
केलिश्वेतसहस्रपत्रतिरतेःकिञ्चक्षपायोषितः
क्रीडाराजतशीथुपात्रतिशशी सोऽयंजगन्नेत्रति॥

(m) आपदातुमदापहारिण्यासद्य एवबोधितस्तत्क्ष-
णोपजातयाप्रतिभयाव्यचोचरम्। अहोममेयंमोहमूलाम-
हत्यापदापतिता। प्रसृततरञ्चसख्यंमयासहधनमित्रस्य-
मत्परिग्रहत्वञ्चरागमञ्जर्याः । मदेनसाचतौप्रोर्णुतौ
श्वोनियतंनिग्रहीष्येते। तदियमिहप्रतिपत्तिर्ययानुष्ठीय-
मानयामन्नियोगतस्तौपरित्रास्येते । माञ्चकदाचिदन-
र्थादितस्तारयिष्यति ॥

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M.

ALGEBRA, THEORY OF EQUATIONS AND TRIGONOMETRY.

I. Find the term involving x^5 in the expansion of $(1 - 2x - 3x^3 + 4x^4)^{-\frac{1}{2}}$.

II. If $\frac{p}{q}$, $\frac{p'}{q'}$, be any two consecutive convergents to $\sqrt{N}$, and $\frac{\sqrt{N} + a''}{r''}$ the complete quotient of the order next after $\frac{p'}{q'}$, show that

$$a'' = \pm (pp' - qq' N) \text{ and } r'' = \pm (q'^2 N - p'^2).$$

Show that $\frac{\pi}{4} = \frac{1}{1+} \frac{1^2}{2+} \frac{3^2}{2+} \frac{5^2}{2+} \ldots$

III. If n be a prime and N be prime to n, show that $N^{n-1} - 1$ is divisible by n.

If x is prime to 703, $x^{36} - 1$ is divisible by 703, and if x is prime to 7, $x^{294} - 1$ is divisible by 343.

IV. Find the relation between the co-efficients of the cubics, $ax^3 + 3bx^2 + 3cx + d = 0$ and $a'y^3 + 3b'y^2 + 3c'y + d' = 0$ when the roots are connected by the relation.

$$\alpha(\beta' - \gamma') + \beta(\gamma' - \alpha') + \gamma(\alpha' - \beta') = 0.$$

V. Any number which renders positive the polynomial $f(x)$ and all its derived functions is a superior limit of the positive roots of the equation $f(x) = 0$.

Example $f(x) = x^4 - x^3 - 2x^2 - 4x - 24$.

VI. If all the real roots of $f'(x) = 0$ could be found, show that it would be possible to find the number of real roots of $f(x) = 0$.

Hence deduce that $(x - a)(x - b)(x - c) - p^2(x - a) - q^2(x - b) - r^2(x - c) - 2pqr = 0$ has all its roots real.

VII. Find the positive root of the equation

$$20x^3 - 121x^2 - 121x - 141 = 0.$$

VIII. If S_m is the sum of the mth powers of the roots of $f(x) = 0$, show that S_m is the co-efficient of y^m in the expansion of $-m \log \left\{ y^n f\left(\frac{1}{y}\right) \right\}$.

IX. Obtain exponential values of the sine and cosine of an angle; and expand $e^{x \sin a} \sin(x \cos a)$ in ascending powers of x.

X. Prove that $\sin\theta = \theta.\left(1-\frac{\theta^2}{\pi^2}\right)\left(1-\frac{\theta^2}{2^2\pi^2}\right)\left(1-\frac{\theta^2}{3^2\pi^2}\right)\cdots$

and thence deduce that $\frac{1}{1^4}+\frac{1}{3^4}+\frac{1}{5^4}+\ldots = \frac{\pi^4}{96}$.

XI. If E be the spherical excess of a spherical triangle, show that

$$\tan\tfrac{1}{4}E = \sqrt{\left(\tan\frac{s}{2}\tan\frac{s-a}{2}\tan\frac{s-b}{2}\tan\frac{s-c}{2}\right)}.$$

The sum of the three sides of a spherical triangle is a quadrant. Show that if the triangle is right angled, the least value of the hypothenuse in $\mathrm{Cos}^{-1}\frac{1}{3}$ and that in that case the spherical excess is $\mathrm{Sin}^{-1}\frac{1}{9}$.

MONDAY, 18TH JANUARY, 2 TO 5 P.M.

GEOMETRY OF TWO AND THREE DIMENSIONS.

I. (α) Any two equations between the co-ordinates represent geometrically one or more points.

(β) A single equation between the co-ordinates denotes a geometrical locus.

Discuss these statements, illustrating your remarks by figures. Prove that the middle points of the diagonals of a complete quadrilateral are collinear.

II. Find the angle between the lines represented by the equation $ax^2 + 2hxy + by^2 = 0$.

Form the equation which will represent the lines bisecting the angles between the lines represented by the equation $x^2 - 5xy + 4y^2 + x + 2y - 2 = 0$.

III. Find the equation of the tangent to the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ at the point $x'\,y'$.

Shew that if ϕ be the angle between the tangents to the circle $x^2 + y^2 - r^2 = 0$ drawn from the point $x'\,y'$,

$$\tan\phi\,(x'^2 + y'^2 - 2r^2) = 2r\sqrt{x'^2 + y'^2 - r^2}.$$

IV. Find when the general equation of the second degree represents (1) an ellipse, (2) a parabola.

Shew that the equation of a parabola referred to a pair of tangents as axes is of the form $\sqrt{\frac{x}{h}} \mp \sqrt{\frac{y}{k}} = \pm 1$, h and k being the intercepts on the axes.

V. Find the equation of an ellipse referred to a pair of conjugate diameters as axes.

Show that the sum of the squares of two semi-conjugate diameters of an ellipse is constant.

VI. Find the magnitude of the axes of the hyperbola $5x^2 - 6xy + 5y^2 - 42x - 6y - 63 = 0$, their equations and the equations of the asymptotes. Trace the curve.

VII. Find the condition that two straight lines in space whose equations are given shall intersect, and the equation of the plane containing the lines.

Show that the length of the perpendicular from the point whose co-ordinates are $b - c$, $c - a$, $a - b$ on the plane $a^3 x + b^3 y + c^3 z = 0$ is $\frac{(a-b)(b-c)(c-a)(a+b+c)}{(a^6 + b^6 + c^6)^{\frac{1}{2}}}$.

VIII. Find the co-ordinates of the centre of the section of an ellipsoid by a plane.

Find the locus of the centres of sections of an ellipsoid by planes which are at a constant distance from the centre.

IX. Obtain the equation of the tangent cone from any point to an ellipsoid.

A plane touches a sphere. Show that the locus of its pole with respect to an ellipsoid concentric with a sphere is a concentric and coaxial ellipsoid.

X. What non-central surfaces are represented by the general equation of the second degree? Find the conditions that it may represent each of these surfaces.

Prove that five normals can be drawn from any point to a paraboloid.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P.M.

NEWTON AND DIFFERENTIAL CALCULUS.

I. Enunciate and prove Lemmas II and III; and employ them to find the area of the conical surface of a right cone.

Enunciate and prove in Newton's manner the property of the radius of curvature, usually written $\rho = r \frac{dr}{dp}$.

II. (*a*) State (*a*) the physical, (*b*) the geometrical principles involved in the proof of Lemma X.

(*b*) A body revolves in an equiangular spiral, find the law of centripetal force tending to the centre of the spiral.

III. A body moves in a parabola, required the law of centripetal force to the focus.

Prove (geometrically) that the hodograph for the motion of a body moving in a conic section, under a centripetal force to the focus, is a circle.

IV. If $y = a(\sin a \tan \theta + \cos a \cot \theta)$.

$x = a(\sin a \cot \theta + \cos a \tan \theta)$.

then $\frac{dy}{dx} = -\frac{y - x}{x - y} \frac{\sin 2a}{\sin 2a}$;

If $y = \log(\tan x + \cot x)$.

then $\log\left(\frac{d^2y}{dx^2}\right) = 2y$;

If $y = \cot^{-1} x$.

then $\frac{d^n y}{dx^n} = (-1)^n \underline{|n-1} \sin^n y \sin ny$;

If $y = (1 + x^2)^n \sin(2n \tan^{-1} x)$,

then $(1 + x^2)\frac{d^2y}{dx^2} - 2(2n - 1)x \frac{dy}{dx} + 2n(2n - 1)y = 0$.

V. Enunciate Taylor's Theorem.

Deduce McLaurin's Theorem from Taylor's, and illustrate its use by finding a series for the value of e.

Expand $\sin(\frac{1}{4}\pi e^x)$ in terms of x, as far as x^4.

VI. Explain the principle involved in the process of "changing the independent variable."

If x, y, be the rectangular, and r, θ, the polar co-ordinates of a point, and ϕ a function of the co-ordinates; show by changing the independent variables that if $\frac{d^2\phi}{dx^2} + \frac{d^2\phi}{dy^2} = 0$.

$$\text{then } \frac{d^2\phi}{d\theta^2} + r\frac{d\phi}{dr} + r^2\frac{d^2\phi}{dr^2} = 0.$$

If $y = xz$, $x = e^{\theta}$, shew that

$$x^2\frac{d^2y}{dx^2} - x\frac{dy}{dx} + y = e^{\theta}\frac{d^2z}{d\theta^2}.$$

VII. Assuming that you have procured a maximum or minimum value of a function of one variable, find a criterion for deciding which of the two it is.

A straight line is drawn from the vertex A of a triangle, meeting the base BC in D. Find the position of D when the ratio $\frac{BD\,DC}{AD^2}$ is a maximum.

VIII. If ρ be the radius of curvature of a plane curve and σ be the corresponding arc of the evolute measured from a fixed point, shew that

$$\sigma \pm \rho = \text{a constant.}$$

A triangle moves in any manner each side having a separate envelope. If the radii of curvature at the points where these sides simultaneously touch their envelopes be ρ, ρ', ρ'', show that

$$a\rho + b\rho' + c\rho'' = \text{a constant} = 2 \times \text{Area of triangle.}$$

IX. If the equation to a curve be written in the form

$$\phi(xy) = u_n + u_{n-1} + \ldots\ldots\ldots + u_2 + u_1 + u_0 = 0.$$

where u_n, u_{n-1}, ... are homogeneous of the nth, $\overline{n-1}^{\text{th}}$,..... degrees; find the equation to the inverse of the curve (in rectangular co-ordinates); and thence show that the inverse of a conic with respect to the origin is a quartic.

If r, r', be coincident radii vectores of two inverse curves, such that $r\,r' = \kappa^2$, show that $\frac{1}{\rho'} = \frac{2p\rho - r^2}{\kappa^2\rho}$.

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

INTEGRAL CALCULUS AND DIFFERENTIAL EQUATIONS.

I. Integrate (1) $\int x^2 \log \left(\frac{a + \sqrt{a^2 - x^2}}{x}\right) dx$.

(2) $\int \tan^{-1} \frac{x+1}{x+2} dx$; (3) $\int e^{-x} \cdot \frac{1 + x^2}{(1-x)^2} dx$.

II. Obtain a formula of reduction for the integral

$\int \cos^m x \cos nx \, dx$, and prove that $\int_0^{\frac{1}{2}\pi} \cos^6\theta \cos^2 5\theta \, d\theta = \frac{5\pi}{64}$

III. Show how to differentiate the integral

$\int_a^b \phi(x, c) \, dx$ with respect to c of which b and a are functions.

Prove that $y = \int_{-1}^{1} (z^2 - 1)^{n-1} e^{xz} \, dz$ satisfies the differential equation $x \frac{d^2y}{dx^2} + 2n \frac{dy}{dx} - xy = 0$.

IV. If r, θ be the polar co-ordinates of any point P on a curve (A), and p, ϕ those of the corresponding point on the pedal (B) of A, prove that

$$s = \frac{dp}{d\phi} + \int p \, d\phi \text{ ; and } s_1 = \int r \, d\phi \text{ ;}$$

where s and s_1 represent the lengths of the arcs of A and B.

The arc of the pedal of a circle, of radius a, is equal to the arc of an ellipse $\left(e = \frac{4}{5}\right)$ the origin being at a distance $\frac{a}{4}$ from the centre of the circle.

V. A sphere is cut by a right cylinder whose base is the circle described on a radius of the sphere as diameter. Apply the formula $V = \iint z r d\theta dr$ to find the volume common to the sphere and cylinder.

VI. Reduce the equation $x \frac{dy}{dx} - y + by^2 = cx^{m+2}$, to the form

$\frac{d^2w}{dx^2} - bcx^m w = 0$.

Integrate in series $4x^4 \frac{d^2y}{dx^2} - y = 0$.

VII. If $\phi(x)$ be a polynomial of the fourth degree, prove the relation

$$\phi(x) - \phi(y) = \tfrac{1}{2}\left\{\phi'(x) + \phi'(y)\right\}(x-y) - \frac{1}{24}\left\{\phi'''(x) + \phi'''(y)\right\}(x-y)^3;$$

and deduce the general integral of the differential equation

$$\frac{dx}{\sqrt{1-x^4}} = \frac{dy}{\sqrt{1-y^4}}.$$

VIII. Give a geometrical interpretation of the singular solution of a differential equation.

Investigate the singular solution of the equation

$$4\left(x + y\frac{dy}{dx}\right)^2 + 25\left(y^2 - xy\frac{dy}{dx}\right) = 0,$$

and shew that it is the envelope of a series of circles described on the subnormal of an ellipse as diameter.

IX. Solve the following equations:—

(1) $(x^2y^3 - y)\,dx - (x^4y^3 - 2x^3y^2 + 3x)\,dy = 0.$

(2) $y^2\frac{d^2y}{dx^2} + 6x\left(\frac{dy}{dx}\right)^2 = 0.$

(3) $\frac{d^3y}{dx^3} + y = x.$

(4) $p^2 + q^2 = x + y.$

WEDNESDAY 20TH JANUARY, 10 A.M. TO 1 P.M.

STATICS AND HYDROSTATICS.

I. Shew that every system of forces can be reduced, in one way only, to a wrench, *i.e.*, a force along a certain axis and a couple about that axis.

Two wrenches (P, G) (Q, H) are combined and the resultant wrench is (R, K); shew that

$$R^2 = P^2 + Q^2 + 2PQ\cos\theta,$$

$$RK = PQ\,d\sin\theta + (PH + QG)\cos\theta + (PG + QH),$$

where θ is the angle between the axes of the wrenches, and d the shortest distance between them.

II. Enunciate and prove the principle of virtual work.

If forces $P_1, P_2, \ldots$ act on a body capable only of motion on a fixed screw, and $a_1, a_2, \ldots$ be the shortest distances of their lines of action from the axis of the screw, and $i_1, i_2, \ldots$ be the angles the lines of action make with the axis of the screw, and s the axial motion along the screw for each radian of rotation, then, for equilibrium.

$$s\Sigma P \cos i + \Sigma aP \sin i = 0.$$

III. Explain the nature of the action at a small smooth or rough hinge, or small joint of any kind. Is it always reducible to a single force passing through the hinge or joint?

Two heavy rods AB, BC are jointed rigidly together at B, making any fixed angle with each other, and this rigid system is suspended from A. Obtain equations to find the action at the joint, and to determine the position of equilibrium.

IV. Obtain formulæ in polar co-ordinates for finding the position of the centre of gravity of a solid of variable density.

The density of a sphere varies as the nth power of the distance from the centre. A sphere, whose diameter is a radius of the original sphere, is cut out. Shew that the distance of the centre of gravity of the remainder from the centre is $\frac{n+3}{(n+6)(2n+7)}a$, where a is the radius of the sphere.

V. Find the work done in stretching an elastic string of natural length a to a length l such that its tension is T.

An elastic string, modulus λ, is stretched round a rough circular arc so that every element of it is just on the point of slipping: if T, T′, are the tensions at its extremities, shew that the ratio of the stretched to the unstretched length is

$$\log \frac{T'}{T} : \log \frac{T'(T+\lambda)}{T(T'+\lambda)}.$$

VI. Shew that the attraction of a spherical shell of uniform density and small uniform thickness upon a point in the interior is zero, and upon an external point is the same as if the shell were concentrated into a particle at the centre of the sphere.

Hence find the attraction of a solid sphere of uniform density at an internal point.

VII. If ρ be the density at any point (x, y, z) of a fluid, and X, Y, Z be the components of force at that point, shew that for equilibrium.

$$\frac{d\rho}{dx}\left(\frac{dZ}{dy}-\frac{dY}{dz}\right)+\frac{d\rho}{dy}\left(\frac{dX}{dz}-\frac{dZ}{dx}\right)+\frac{d\rho}{dz}\left(\frac{dY}{dx}-\frac{dX}{dy}\right)=0.$$

Shew that for any closed circuit on a surface of equal density.

$$\int (Xdx + Ydy + Zdz) = 0.$$

What condition must the forces satisfy in order that the surfaces of equal density may coincide with those of equal pressure?

VIII. A hollow hemisphere is just filled with homogeneous heavy fluid and is suspended by a string attached to a point in the edge Find the ratio of the whole pressures on the curved surface and on the flat base.

IX. Find the conditions that a floating body should be in stable equilibrium.

A cylinder is floating in fluid of density varying as the depth, with axis vertical. Shew that the condition for stable equilibrium is

$$\frac{a^2}{h^2} > \left\{\left(\frac{\rho}{\sigma}\right)^{\frac{1}{2}} - \frac{2}{3}\frac{\rho}{\sigma}\right\}$$

where a is the radius, h the height, and ρ the density of the cylinder, and σ the density of the fluid at a depth $\frac{1}{2}h$.

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

OPTICS AND ASTRONOMY.

I. State the three fundamental laws of illumination; and establish the formula

$$I \propto \frac{\text{cosine } \angle \text{ of incidence}}{(\text{distance})^2}.$$

If a luminous point be placed at the centre of the Lemniscate $r^2 = c^2 \cos 2\theta$, every portion of the curve will be uniformly illuminated by it.

II. The caustic formed by rays reflected at a circular arc, radius a, from a point on its circumference, is a one-cusped epicycloid—the cardioid $r = \frac{2a}{3}(1 - \cos\theta)$.

III. A ray refracted at the surface of a sphere, in a plane passing through its centre, emerges after n partial reflections at its internal surface. Find the whole deviation; and show that this will be a minimum if the angle of incidence be $\cos^{-1}\frac{\mu^2-1}{n(n+2)}$.

IV. Define irrationality of dispersion, and secondary spectra. Whence arises the possibility of an achromatic combination?

A pencil passes eccentrically through two thin lenses of the same material, separated by a given interval, its axis before incidence intersecting the common axis of the lenses in a given point. Find the condition of achromatism.

V. Trace the course of a pencil of light from a distant object through the Newtonian telescope. Why should the small inclined mirror be elliptical; and what should the eccentricity of the ellipse be?—Show that, if the telescope be fitted with a Huyghens' eyepiece, its magnifying power will be $\frac{2F}{3f}$; and the angle subtended by a distant object $\frac{3a}{2F}$, where a is the corresponding linear dimension of the real image. How can the latter easily be ascertained in practice?

VI. State the chief advantages of the Transit Circle, as compared with the Mural Circle and the Transit; and enumerate in order the adjustments it requires.

Show how to calculate the deviation error in low latitudes.

VII. Define the Nonagesimal, and show that its longitude at a given time and place is $\tan^{-1}(\tan\phi \sin\omega \sec M \pm \tan M \cos\omega)$, where ω is the $\mathcal{R}$ of the Meridian.

VIII. Find the time of the year when twilight is shortest at a given place; and show that in latitude 60°, its shortest duration is $2h.\ 25m.$

Sin 18° 14′ = ·3128875 diff. for 1′ = ·0002763.

IX. Show that the parallax in right ascension is given by the formula $\tan H = \frac{a \sin h}{1 - a \cos h}$, where $a = \frac{\sin p \cos\phi}{\cos\delta}$, h being the hour angle, p the parallax in altitude, ϕ the geocentric latitude of the place, and δ the declination.

X. Determine the relative position of Venus, when at greatest brilliancy, on the supposition that the whole of her visible surface is uniformly luminous, and that the orbits of both the planet and the Earth are circular.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

DYNAMICS.

I. Define *simple harmonic motion.*

Prove that a uniform circular motion is equivalent to two simultaneous rectangular harmonic motions, of the same amplitude and period, but differing one-fourth in phase.

Show that two simple harmonic motions in rectangular directions, of the same epoch and whose periods are as 1 : 2, are equivalent to a parabolic vibration.

II. Find the range and time of a complete vertical oscillation of a heavy particle suspended from a fixed point by an elastic string.

Two bodies, W, W', hang at rest, being attached to the lower end of a fine elastic string whose upper end is fixed. Supposing one of them W' to drop off, find the subsequent motion of the other.

III. Prove that the velocity at any point in a central orbit is the same as that acquired in moving from rest along one-fourth the chord of curvature at the point, under the action of a constant force equal in intensity to that of the central force at the point.

A body is describing a circle under a central force $\frac{\mu}{r^2}$ in its centre. If the absolute force be suddenly reduced to one-half, show that the subsequent path of the body is a parabola.

IV. Investigate the motion of a particle in a vertical circle under the action of gravity.

If the particle be projected from the lowest point of the circle with a velocity greater than $\sqrt{(2ag)}$ and less than $\sqrt{(5ag)}$, find the point at which the particle will leave the circle; and the direction of motion of the particle when it returns to the circle.

V. A particle is constrained to move on a smooth surface. Find the general equations of motion.

A particle is projected horizontally along the interior surface of a fixed smooth hemisphere, the axis of which is vertical and vertex downwards. Given the point of projection, determine the velocity so that the particle may just ascend to the rim of the hemisphere.

VI. Show that a plane figure can be moved from any one position into any other in its own plane by a rotation round a fixed point in the plane.

A plane area receives a motion of translation whose components parallel to the axes are a and b, and a rotation θ round the point in the body which at the beginning of the motion coincides with the fixed origin. Determine the co-ordinates of the point a rotation round which would bring the body into the same position; and show that the amplitude of rotation is the same in both cases.

VII. Investigate the motion of a heavy chain inside a smooth tube which is revolving uniformly about a vertical axis in its own plane.

If the tube be circular and revolve about a vertical axis through the centre C, prove that

$$a\alpha\left(\frac{d\theta}{dt}\right)^2 = \frac{1}{4}\omega^2 a\left\{\sin 2\theta - \sin 2(\alpha+\theta)\right\} - 2g\left\{\sin\theta - \sin(\alpha+\theta)\right\} + C,$$

where $\theta = \angle$ OCA, $\alpha = \angle$ACB, O being the lowest point of the circular tube, A, B the extremities of the chain, and a the radius of the circular tube.

VIII. Define the terms *work done by a force*, and *force-function*. In what cases does a force function exist?

If m, m' be the masses of two particles attracting each other with a force $\frac{mm'}{r^2}$, r being the distance between them, prove that the work done when they have moved from an infinite distance apart to a distance r is $\frac{mm'}{r}$.

IX. A body in motion about a fixed axis is acted on by any impulsive forces. Obtain the equations of motion, and show how they may be simplified.

A circle, hanging at rest, is capable of turning round a horizontal tangent-line. How must it be struck that there may be no impulse on the axis and that it may rise through 60°?

X. The motion of a body is given by the linear velocities (u, v, w) of the centre of inertia, and the angular velocities $\omega_x, \omega_y, \omega_z$. Find the angular momentum about the straight line $\frac{x-a}{l} = \frac{y-b}{m} = \frac{z-c}{n}$.

A triangular area ACB whose mass is m is turning round the side CA with an angular velocity ω. Find the angular momentum about the side CB.

THURSDAY, 21ST JANUARY, 2 TO 5 P.M.

PROBLEMS.

I. If $(5\sqrt{2}+7)^{2n+1} = m + a$ where m and n are integral and a a positive proper fraction, prove that $a(m+a) = 1$.

II. Prove $\left(1-\frac{1}{2^2}\right)\left(1-\frac{1}{3^2}\right)\left(1-\frac{1}{5^2}\right)\ldots = \frac{6}{\pi^2}$.

$$\left(1+\frac{1}{2^2}\right)\left(1+\frac{1}{3^2}\right)\left(1+\frac{1}{5^2}\right)\ldots = \frac{15}{\pi^2}.$$

where 2, 3, 5, ... are the prime numbers.

III. If $\cos\alpha + \cos\beta + \cos\gamma + \cos\delta = 0$.
$\sin\alpha + \sin\beta + \sin\gamma + \sin\delta = 0$.
prove that

$\cos(2n+1)\alpha + \cos(2n+1)\beta + \cos(2n+1)\gamma + \cos(2n+1)\delta = 0$.
$\sin(2n+1)\alpha + \sin(2n+1)\beta + \sin(2n+1)\gamma + \sin(2n+1)\delta = 0$.

IV. If A′ B′ C′ be the spherical triangle formed by joining the middle points of the sides of an equilateral spherical triangle ABC, prove that

$$\tan\frac{A'}{2} = \tfrac{1}{2}\sec\frac{A}{2}.$$

V The locus of the pole of a given straight line with respect to any conic inscribed in a given quadrilateral is a straight line.

VI. A constant length $PQ = a$ is taken along the tangent at P to a curve. Prove that the radius of curvature at Q of the locus of Q is equal to $(\rho^2 + a^2)^{\frac{1}{2}} \div \rho^2 + a^2 - a\rho'$, where ρ is the radius of curvature at the point P of the curve, and ρ' that at the corresponding point of its evolute.

VII. Prove

$$\int_0^1 \frac{dx}{(1-x^4)^{\frac{1}{2}}} = \frac{1}{\sqrt{2}} \int_0^1 \frac{dx}{(1-x^4)^{\frac{1}{4}}}.$$

VIII. The generators at a point P of the hyperboloid $x^2/a^2+y^2/b^2 - z^2/c^2 = 1$ meet the plane of (xy) in Q, R, and O is the centre of the hyperboloid; prove that

$$\frac{PQ^2}{PR^2} = \frac{a^2+b^2+c^2-OQ^2}{a^2+b^2+c^2-OR^2}.$$

If Q, R, are, the extremities of conjugate diameters of the section made by the plane of (xy) shew that

$$PQ^2 + PR^2 = a^2 + b^2 + 2c^2.$$

IX. A semicircular area revolves about a tangent line; prove that the distance from the point of contact of the centre of gravity of the solid generated is equal to $\frac{4a \sin \alpha}{3\pi - 4 \cos \alpha}$, where a is the radius of the semicircle and α the inclination of its base to the tangent line about which it revolves.

X. Two rods, each of length $2a$, are jointed together and placed on a smooth table in a straight line parallel to its edge. A string is tied to the joint and passing over the edge of the table at right angles has a weight tied to its other end. If θ be the angle the rods have turned through at time t after motion begins, prove that

$$\left(\frac{d\theta}{dt}\right)^2 \left\{2 + n(1 + 3\sin^2\theta)\right\} = 3\frac{g}{a}\sin\theta,$$

where n is the ratio of the mass of each rod to that of the falling weight.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

PURE MATHEMATICS.

I. What are the circular points at infinity? Explain their use in the general theory of projection.

Two conics intersect in four points, and their four common tangents are drawn. Shew that the line joining the poles of any one of their common chords passes through two of the intersections of their common tangents.

II. If the equation to a conic be given in the form $LM = R^2$ where L, M, R are functions of x and y of the first degree, shew

that the equation of any tangent may be written in the form $\mu^2 L - 2\mu R + M = 0$.

Prove that the envelope of a chord of a parabola $y^2 = 4ax$ which subtends a right angle at the focus is the ellipse $(x - 3a)^2 + 2y^2 = 8a^2$.

III. Shew that the straight lines $Ax^2 + 2Hxy + By^2 = 0$, $ax^2 + 2hxy + by^2 = 0$ will form a harmonic pencil if $Ab + Ba - 2Hh = 0$.

IV. Prove that the equation $x^4 + x^3 - 60x + 16 = 0$ has two real roots, and apply Horner's method to find the value of the smaller one correct to four places of decimals.

V. If r be the radius vector to a point of a locus traced out on a sphere, and p the perpendicular from the origin on the tangent (all the lines being drawn on the sphere), prove that the equation to a small circle is $\sin p = A + B \cos r$, B, A, being constants.

If ρ is the radius of curvature, measured in the same way, at any point of a curve, prove that $\sin \rho = \dfrac{\sin r}{\cos p} \dfrac{dr}{dp}$.

VI. Define $\Gamma(n)$, B (l, m) and state the relation between these two kinds of functions.

Prove $\displaystyle\int_0^1 \frac{dx}{\sqrt{1-x^4}} = \frac{\{\Gamma(\tfrac{1}{4})\}^2}{4\sqrt{(2\pi)}}$.

VII. Solve the differential equations

$$(1 + x^2)^2 \frac{d^2y}{dx^2} + 2x(1 + x^2)\frac{dy}{dx} + n^2 y = 0$$

$$\frac{d^4y}{dx^4} + 16y = e^{x\sqrt{2}} \sin x\sqrt{2}$$

$$\frac{d^2y}{ds^2} = \left(\frac{dy}{dx} - x\frac{d^2y}{dx^2}\right)^2$$

$$x\frac{dx}{dx} + y\frac{ds}{dy} + x + y = 0$$

$$\frac{d^2u}{dx^2} + \frac{d^2u}{dy^2} + \frac{d^2u}{dz^2} - \frac{d^2u}{dydz} - \frac{d^2u}{dzdx} - \frac{d^2u}{dxdy} = 0.$$

VIII. The equations to find the direction cosines (l, m, n) of the generators at the point (a, b, c) of the quadric surface $F(x, y, z) = 0$ are

$$\left(l\frac{d}{da} + m\frac{d}{db} + n\frac{d}{dc}\right)F(a, b, c) = 0$$

$$\left(l\frac{d}{da} + m\frac{d}{db} + n\frac{d}{dc}\right)^2 F(a, b, c) = 0.$$

IX. Give any definition of a developable surface and deduce the partial differential equation of such surfaces.

Prove that the polar reciprocal of any curve in space is a developable surface. What relation does the edge of regression of this surface bear to the original curve?

FRIDAY, 22ND JANUARY, 2 TO 5 P.M.

PROBLEMS.

I. D, E are points in the diameter ACB of a circle equidistant from the centre C. Through P, a point on the circumference, PD, PE are drawn to meet the circle in F and G, and FG meets the diameter produced in H. If Q be a point in the diameter at the same distance from C as H, PQ touches the circle.

II Through the middle point of the semi-minor axis of an ellipse, a straight line is drawn parallel to the major axis, and the points in which it meets the curve are joined to the further end of the minor axis. Show that the triangle so formed is the triangle of maximum area that can be inscribed in the ellipse.

III. A parabola touches two sides of a triangle and the perpendiculars to them from the opposite angles. Find its focus and directrix and the tangents to it from the centre of the nine-point circle.

IV. If $a_0 + a_1 x + a_2 x^2 + a_3 x^3 + a_4 x^4 + a_5 x^5 +$ ..... be a convergent recurring algebraical series of the third order, show that its sum to infinity is

$$\begin{vmatrix} 0, & s_1x^2, & s_2x, & s_3 \\ a_0, & a_1, & a_2, & a_3 \\ a_1, & a_2, & a_3, & a_4 \\ a_2, & a_3, & a_4, & a_5 \end{vmatrix} \div \begin{vmatrix} x^3, & x^2, & x, & 1 \\ a_0, & a_1, & a_2, & a_3 \\ a_1, & a_2, & a_3, & a_4 \\ a_2, & a_3, & a_4, & a_5 \end{vmatrix},$$

when s_1, s_2, s_3, denote the sum of the first 1, 2, 3 terms respectively.

V. If n be any positive integer, prove that

$$\frac{2^{4n-2}}{\underline{|4n}} = \frac{1}{\underline{|2n-1} \cdot \underline{|2n+1}} + \frac{1}{\underline{|2n-3} \cdot \underline{|2n+3}} + \cdots + \frac{1}{\underline{|4n-1}}.$$

VI. If in a spherical triangle $A = \frac{2\pi}{5}$, $B = \frac{\pi}{5}$, $C = \frac{\pi}{2}$, prove that $a + b = \frac{\pi}{2}$ and $\tan\frac{a}{2} \tan\frac{b}{2} = \tan\frac{\pi}{20}$.

VII. Show that $\frac{1}{1\,3} + \frac{1}{7\cdot 9} + \frac{1}{13\cdot 15} + \ldots\ldots = \frac{1}{8}\log 3 + \frac{\pi\sqrt{3}}{24}$.

VIII. Given $y = c_1\ (x-1)^3 + c_2\ (x-w)^3 + c_3\ (x-w^2)^3$, where w is an imaginary cube root of unity, prove that

$$\left(x^3 - 1\right)\frac{d^3y}{dx^3} - 3x^2\ \frac{d^2y}{dx^2} + 6x\ \frac{dy}{dx} - 6y = 0.$$

IX. If a projectile move in a medium the resistance of which varies as the square of the velocity, and if ρ, ρ' be the radii of curvature at two points at each of which the direction of motion is inclined at an angle α to the horizon: prove that $\frac{1}{\rho} + \frac{1}{\rho'} = \frac{2\cos^2\alpha}{r}$, r being the radius of curvature at the highest point.

X. A portion of the water in a tank, in the shape of a vertical cylinder of radius a, rotates about its axis, the angular velocity at any point being $k\,(a^2 - r^2)^{\frac{1}{2}}$ where r is the distance from the axis. Shew that the volume of the depression below the surface of the tank is $\frac{\pi\ k^2\ a^6}{12g}$.

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M.

MIXED MATHEMATICS.

I. Find the linear density of a string in order that it may hang under the action of gravity in the form of the curve $y = f(x)$.

If the string hang in the form of a parabola, vertex downwards, shew that the weight of any portion varies as the horizontal projection of its length.

II. Define the potential at any point, due to any attracting mass, and shew that the attraction at the point, resolved in the direction of any line s, is $-\frac{dV}{ds}$.

If V be the potential of any distribution of matter partly within and partly without a closed surface S and n is the normal at an element $d\sigma$ of S, prove that

$$\int \frac{dV}{dn}\,d\sigma + 4\pi M = 0$$

where M is the whole amount of matter within S.

Hence show that the potential cannot be a maximum or minimum at any point unoccupied by matter; and that a particle placed at such a point, if in equilibrium, must be in unstable equilibrium.

III. A pendulum is formed of a weightless rod of length l with a ring of mass M at one extremity, and a mass m at the other; M is constrained to move on a fixed smooth horizontal wire, and m is held so that the rod makes an angle α with the vertical, and is then let go. If θ is the angle the rod makes with the vertical at time t, prove that

$$\frac{M + m \sin^2 \theta}{M + m} \left(\frac{d\theta}{dt}\right)^2 = \frac{2g}{l} (\cos \theta - \cos \alpha).$$

Deduce the equation of motion of an ordinary simple pendulum.

Shew that the centre of gravity of M and m moves in a straight line.

If α is very small shew that the time of a small oscillation is the same as that of a simple pendulum of length $l \left(1 + \frac{m}{M}\right)^{-1}$.

IV. What is the hodograph of a moving point? When the acceleration is directed to a fixed point shew that the hodograph is the reciprocal of the orbit turned through a right angle about the fixed point.

If P be the acceleration towards the fixed centre at a point whose radius vector is $1/u$, and $\frac{1}{2}h$ be the rate of describing areas about the fixed centre, prove that the perpendicular on the tangent to the hodograph is hu, and the radius of curvature at the corresponding point of the hodograph is P/hu^3. Deduce the ordinary polar equation of the orbit

V. In elliptic motion, define the true, mean, and eccentric anomalies, and find the relations between them. Employ these relations to express the radius vector and the true and eccentric anomalies in terms of the time t, the eccentricity of the orbit being so small that its cube and higher powers may be neglected.

VI. Shew how Lagrange's equations of motion may be adapted to find the small oscillations of a connected system of bodies.

Four equal uniform rods jointed freely at their extremities are suspended at A, and are kept in equilibrium in the form of a square ABCD by an elastic string joining AC such that twice the weight of one of the rods would double its length; shew that if C be slightly depressed, the system will execute small oscillations in the same time as a simple pendulum of length $\frac{5}{12}$ AC.

VII. Explain how to determine the initial changes in the reactions between different parts of a system consequent on release from constraint.

A uniform triangular lamina ABC is suspended by three equal and parallel strings tied to A, B, C, and the plane of the triangle is horizontal; if one string be cut, then the tension of each of the others will be instantaneously halved.

VIII. Shew that the caustic of a given reflecting curve for rays proceeding from a given point is similar to the evolute of the pedal of the curve with respect to the same point.

A luminous point is at the pole of a given reflecting curve; r is the radius vector at any point of the curve, and λ is half the corresponding chord of curvature through the pole. Shew that for points on the curve corresponding to cusps on the caustic

$$\frac{d\lambda}{dr} = 2\,\frac{\lambda - r}{r}.$$

IX. Enumerate the different methods of finding the latitude of a place.

If two stars whose right ascensions are α, α', and declinations δ, δ', are together on the horizon of a certain place, its latitude l is given by

$$\cot^2 l = \operatorname{cosec}^2(\alpha - \alpha')\left\{\tan^2\delta + \tan^2\delta' - 2\tan\delta\tan\delta'\cos(\alpha - \alpha')\right\}$$

SATURDAY, 23RD JANUARY, 2 TO 5 P.M.

PROBLEMS.

I. Solve

(α) $x^3 - (a + 2b)\,x^2 + (2ab + b^2 + 3c^2)\,x - a\,(b^2 + 3c^2) = 0$, using Tartaglia's (or Cardan's) rule.

(β) $(b - c)^5\,(x - a)^5 + (c - a)^5\,(x - b)^5 + (a - b)^5\,(x - c)^5 = 0$.

II. (α) If N is any number in the scale whose radix is 13, 14 or 15, N ends in the same digit as N^{13}.

(β) Find a general expression for all number whose cube increased by 2 is exactly divisible by 25.

III. A tetrahedron has its *opposite* edges equal; prove that the centres of the inscribed and circumscribed spheres coincide with

the centre of gravity of the solid; and that the centres of the escribed spheres are on the circumsphere at the extremities of the diameters through the opposite vertices.

IV. Through any point P in the plane of a triangle ABC parallels are drawn to the sides. Prove that the six points of intersection with the sides lie on a conic; and find the position of P for which the conic becomes a *circle*.

V. The tangent at any point P of the hypocycloid $x = a(2\cos 2\theta + \cos 4\theta)$; $y = a(2\sin 2\theta - \sin 4\theta)$ meets the curve again at M and N. Shew that MN is of constant length, and that the tangents at M and N intersect at right angles on a fixed circle.

VI. Find for what positions of a plane the orthogonal projection of an ellipsoid on it will be a circle.

VII. Integrate

$$\left(\frac{dy}{dx}\right)^3 - \frac{3}{2}\left(\frac{dy}{dx}\right)^2 = (y - x)^3.$$

VIII. From a semicircle whose diameter is on the surface of a fluid, a circle is cut out, whose diameter is the vertical radius of the semicircle. Find the centre of pressure of the remainder.

IX. If S be the sun, and A and B two planets that appear stationary to one another, shew that tan SBA : tan SAB :: periodic time of A · periodic time of B.

X. Investigate the motion of a cycloidal pendulum when acted on by a constant force f, always in a direction opposite to that of its motion, in addition to the force of gravity.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M.

PHYSICS I.— GENERAL PRINCIPLES AND SOUND.

I. Explain the terms Fundamental and Derived Units, and the method of translating measurements from one system of units to another. Illustrate your answer by reference to the dimensions of the units of acceleration, force, and energy.

II. State Newton's law of universal gravitation, and apply it to determine the number of beats that would be made by a pendulum in one hour at the top of a hill 10,000 feet high, supposing that, at

the sea level and in the same latitude, the pendulum beats seconds. Why is it necessary to specify the latitude?

III. Describe some method by which the compressibility of water can be accurately determined, pointing out the means employed for eliminating the compressibility of the containing vessel

IV. State the laws of the rise and depression of liquids in capillary tubes, and give, in some detail, an explanation of the phenomena.

V. Give an account of the general phenomena of diffusion. Explain the difference between the relative times of effusion and transpiration of the various gases.

VI. If the specific gravity of coal gas be taken as 0·35 at 0° C, calculate the dimensions of a spherical balloon that would lift a weight of 1,000 lb., the material of the balloon weighing 1 oz. per square foot. How could you take into account the change of temperature and pressure on ascending?

VII. Apply the principle of energy to determine the velocity acquired by a body in sliding down a rough inclined plane (slope 1 in 8), taking $\mu = 0{\cdot}05$.

VIII. Describe some experiments for determining the difference between the velocity of sound in air and in water, and point out the cause of the difference.

IX. Describe Helmholtz's resonators and explain their use in analysing complex sounds.

X. How does the rate of vibration of a stretched string vary with its length, diameter, and density, and with the stretching weight?

XI. What is the numerical relation between the fundamental tone of an open organ pipe and a closed one of the same diameter and length? How do the harmonics differ in each?

MONDAY, 18TH JANUARY, 2 TO 5 P.M.

PHYSICS II.— LIGHT AND HEAT.

I. What is meant by Joule's Equivalent? Explain fully how its value can be determined by experiments on the compression of gases.

II. Describe a method by which the dilatation of a liquid can be determined without any previous knowledge of the dilatation of solids, and thence show how the cubical dilatation of solids can be measured.

III. If the coefficients of linear dilatation of brass and iron are 0·00001867 and 0·00001220 respectively, calculate the relative lengths of the bars of these two metals required for a Harrison's gridiron pendulum.

IV. Describe the method employed by Forbes to determine the absolute conductivity of heat in metals, pointing out the various steps by which the final results can be obtained from the experimental data.

V. Explain the theory of the indicator diagram, and show how the horse-power of an engine can be calculated from such a diagram.

VI. What is a caustic? Find the form of the caustic produced when parallel rays of light fall on a concave spherical mirror.

VII. Prove that the amount of deviation of a ray of light increases with the angle of incidence, and thence show that when a ray of light passes through a prism the deviation is always towards the base.

VIII. Explain the formation of a spectrum by means of a diffraction grating. In what respects does the spectrum so obtained differ from that got by means of a prism?

IX. Describe and explain the phenomena observed when a thin plate of Iceland spar, cut perpendicular to the axis, is placed between two pieces of tourmaline, one of which is rotated.

X. Explain, by reference to the kinetic theory of gases, the effect of pressure on the spectrum of a gas.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P.M.

PHYSICS III.— ELECTRICITY AND MAGNETISM.

I. What is the meaning of the term *specific inductive capacity*? Show how it can be measured.

II. Write a short sketch (not exceeding two pages) of what is known of the earth's magnetism, and give definitions of the technical terms used.

III. A short magnetic needle is suspended in the centre of a coil of wire. Form the equation connecting the strength of the current passing through the coil with the deflection of the needle, and point out what is required to be known in order that the measurements may be expressed in absolute units.

IV. Describe one modern form of Dynamo-electric machine.

V. The two poles of a battery are joined to two long insulated wires of very low resistance. These wires are joined by n cross wires each having a resistance of R ohms; compare the currents flowing through a cross wire when $n = 1, 2, 3$, &c., neglecting the resistance of the battery.

VI Define the term *potential*. n small spheres, each of radius r, and charged to a potential V coalesce to form a single sphere; find the potential of this sphere.

VII. Describe, *either* Thomson's quadrant electrometer, *or* Thomson's portable electrometer, and explain how the latter can best be employed for measuring atmospheric electricity.

VIII. What is a secondary battery? Explain clearly the error involved in the name *storage battery*.

IX Describe the Bell telephone and explain its action. How do you account for the action of a microphone?

X. A circuit consists of a copper and an iron wire and a galvanometer. One of the junctions is heated and the other is kept cold. How is the galvanometer affected as the temperature of the hot junction is gradually raised to a bright red heat? and how can the result be represented graphically?

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

CHEMISTRY.

I How is ozone prepared? What evidence is there to shew that it is allotropic oxygen.

II. Describe the preparation and properties of ammonium amalgam.

III. Write a short article descriptive of the analogies of potassium, sodium and ammonium, and their compounds.

IV. Explain the preparation of the pure oxide of antimony from the native sulphide, and the preparation of tartar emetic from this oxide. Give equations.

V. Write a short exposition of the doctrine of quantivalence What is remarkable about the quantivalence of aluminium ?

VI. Enumerate the chief natural compounds of aluminium. How much dried alum is there in 100 lbs. of potash alum in crystals ?

VII. Give the properties and uses of mercury ? What is its chief ore, and how is the metal extracted from it ?

VIII Illustrate the chemical law of multiple proportions as explained by the atomic theory, employing for that purpose the stated composition of the two iodides of mercury.

IX. How is mercuric cyanide prepared ? Give the preparation and properties of cyanogen and hydrocyanic acid.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M

CHEMISTRY.

I. The empirical and molecular formulæ are required of a substance which was examined with the following results —

On combustion 0·461 grm. yielded 1·094 grm. CO_2 and 0 554 grm OH_2.

Vapor density determination by Dumas' method.

Weight of globe full of air at 16° C = 20·2578 grm.

" " full of vapor sealed at 167° C = 20 41 grm.

Capacity of globe = 171·5 C. C

II. Explain the constitution of chloral, and give a method for preparing it. What is the action of (*a*) potassium hydroxide and (*b*) nitric acid upon it ?

III. Give an account of the natural sources, chemical constitution and properties, and commercial uses of tartaric acid ?

IV. Explain the constitution of hydroquinone, and give a method for obtaining it. What action have oxidizing agents on it ?

V. How is alizarin prepared artificially, and what are its uses ? Explain by graphic formulæ the relation it bears to anthracene. How does nitric acid act upon alizarin ?

WEDNESDAY, 20TH JANUARY, 2 TO 5 P M.

CHEMISTRY.

I. By what methods may the metals Potassium, Sodium and Lithium be separated quantitatively ?

0 85 grm. of the mixed Chlorides of Potassium and Sodium gave 2 02 grms. of the mixed Sulphates: What weight of each metal did the mixture contain ?

K = 39·04. Na = 22·99 Cl = 35·37.
O = 15 96. S = 31·98.

II. Describe fully the methods for determining the vapor density of volatile solids and liquids introduced by Dumas, Gay Lussac, Hofmann, and V. and C. Meyer.

Calculate the vapor density of a substance for which by Meyer's method the following figures were obtained:—

Weight of substance	0 317 grm.
Barometer reduced to 0°	757 m. m.
Tension of aqueous vapor at 17° ..	14 421 m. m.
Volume of air	15 6 c. c.
Temperature of room	17°

III. Give a short history of the metal Thallium, stating what you know concerning its discovery, occurrence, production, Physical and Chemical properties, detection and estimation, and chief compounds. For what reasons has it been termed the ornithorhynchus of the metals ?

IV. Give a full description of the methods by which Nitrogen, Sulphur and Chlorine in organic compounds are determined.

V. How would you conduct a qualitative examination of urine, and how would you determine the quantity of urea and grape sugar present in a given sample ?

VI. By what characteristic reactions may the following substances be recognized:—Quinine, Morphine, Strychnine, Benozic, Acid, Succinic Acid, Alizarin.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

PRACTICAL CHEMISTRY.

A powder containing the following substance was given for qualitative examination.

Ammonium Chloride, Arsenic Trioxide, Chromium Oxide, Magnetism Sulphate, Strontium Chloride and Tartar Emetic—

WEDNESDAY, 21ST JANUARY, 2 P.M. TO 5 P.M.

(1) To determine volumetrically the copper in a solution of copper sulphate.

(2) To determine gravimetrically the sulphuric acid in a solution containing the same.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

GEOLOGY.

I. Define the terms 'Shingle,' 'Rubble,' 'Grit,' 'Silt,' 'Shale,' 'Marl,' 'Killas,' 'Kunkur.'

II. What are 'Joints'? Distinguish between the 'jointing' observable in (*a*) stratified, (*b*) igneous, and (*c*) schistose rocks, respectively, and state the causes to which it is assigned.

III. Compare the Tertiary strata of the London and Hampshire Basins.

IV. Explain the division of the igneous rocks into 'basic' and 'acidic.' Give the mineral composition of, and refer to their proper division, the following rocks:—Basalt, Gabbro, Syenite, Diorite, Pitchstone, Andesite.

V. Describe succinctly the phenomena of 'regional' and 'contact' metamorphism, respectively. What new minerals have been produced in rocks whose metamorphism is of the latter description?

VI. State the physical characters, origin, and fossil contents of (*a*) 'Loess,' (*b*) 'Ooze,' and (*c*) 'Till.'

VII. Give reasons for and against placing the Permian deposits of England in the Palæozoic and the Triassic in the Mesozoic series.

VIII. Of what Geological formations are the following fossils, respectively, characteristic:—Calceola sandalina, Galerites albo-

galerus, Hymenocaris vermicauda, Lithostrotion basaltiforme, Calymene Blumenbachii, Archæopteryx macrura?

IX Enunciate the principal theories that have been propounded regarding the probable condition of the Earth's interior, setting forth briefly the arguments in favor of and against each theory.

X. Determine the Geological positions of the following deposits:—(*a*) Stones-field Slate, (*b*) Lingula Flags, (*c*) Nummulitic Limestone, (*d*) Speeton Clay, (*e*) Coniston Limestone, (*f*) Singareni Coal Field

XI What Astronomical conditions would be most favorable to the production of a Glacial Epoch in the Northern Hemisphere? Give the reasons for your answer.

XII. Name and describe the specimens placed before you [Quote the number assigned to each specimen before you proceed to identify it].

FRIDAY, 22ND JANUARY, 2 TO 5 P.M.

MINERALOGY.

I. Expound the laws of crystalline *symmetry*, and explain the terms (*a*) Replacement, (*b*) Truncation, and (*c*) Bevelment.

II. To what crystallographic system do the following minerals belong, and in what form are they commonly found:—Sulphur, Leucite, Dolomite, Diallage, Wolfram, Apophyllite.

III. Describe a "Nicol's Prism," and explain the use of the Polariscope in Mineralogy. How is Orthoclase distinguished from Labradorite under polarized light?

IV Mention the characteristics by which you would identify the several varieties of Quartz in the field Describe the phenomena observable in the cavities in Quartz crystals, and state what may be deduced from them. What is Tabasheer?

V Distinguish between 'dykes,' 'lodes,' and 'veins,' and briefly explain their formation.

VI Enumerate the principal ores of Lead, and describe fully any *one* of them.

VII. What is meant by the 'index of refraction'? State the difference between that of (*a*) Water, (*b*) Calcspar, and (*c*) Diamond.

VIII. Indicate the distinctive characters of Platinum, its uses, modes of occurrence, and the localities in which it is found.

IX. Explain the mineral origin and manufacture of the following articles of commerce—'Brass,' 'Steel,' 'German silver,' 'Bronze,' Britannia metal.'

X. State the chemical composition and directions of easy cleavage of Zircon, Olivine, Cryolite, and Anhydrite.

XI. Name three minerals remarkable for their pyro-electric properties.

XII. Identify the specimens placed before you, quoting the number assigned to each before you proceed to describe it.

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M

PALÆONTOLOGY

I Describe the structure of the Order *Spongidæ*, and name the most important genera Point out any affinities to living genera that they exhibited, and state their distribution in time.

II Describe fully the genus *Rastrites*; illustrate its form by a sketch. To what geological period does it belong?

III. Explain, in detail and by sketches, the typical structure of the *Crinoidea*; name some of the leading genera, both fixed and free, and state their development in geological time.

IV. Name and describe some fossils representing the order of *Annelida errantia*. To what geological periods do they belong?

V Describe fully and illustrate by sketches the Morphology of the Trilobitæ. Name and characterise at least four of the leading families. Give their distribution in time.

VI. Describe and illustrate by sketches a fossil type of each of the following families of Mollusca — *Spiriferidæ*, *Lingulidæ*, *Hippuritidæ*, *Trigoniadæ*, *Turbinidæ*, *Atlantidæ*. Give in each case the distribution in time and the zoological position of the family.

VII Describe and illustrate the typical structure of the *Ganoidei*; name the principal families of that order, and point out briefly how you distinguish them.

VIII. Give a sketch of the Floras of the Secondary (Mesozoic) Period showing the botanical relations of the genera named. If you

are acquainted with any facts relating to the Indian Mesozoic Floras, state them fully.

IX Name (at least generically) the fossils set before you, and give their respective Zoological and Stratigraphical positions. The number on each specimen must be quoted.

SATURDAY, 23RD JANUARY, 2 TO 5 P M.

SUBJECT FOR AN ESSAY.

On the threefold action (destructive, conservative and reproductive) on the earth's surface of animal and vegetable life, with special reference to the geological changes caused by man.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P M.

STRUCTURAL BOTANY.

I Describe the two plants marked *A* and *B*, and refer them to their natural orders.

II What is an *Andrœcium*? Mention some of the more important modifications, to which its parts are subject.

III. Give examples of the following forms of—

(*a*) Leaves—*obovate, runcinate, digitate.*

(*b*) Flowers—*cleistogamous, achlamydeous, diœcious.*

(*c*) Fruit—*apocarpous, septicidal, folicle*?

IV In what branches of the Vegetable Kingdom do plants present no differentiation between *root, stem* and *leaf*?

V. Give examples of some of the chief ways, in which fruits dehisce.

MONDAY, 18TH JANUARY, 2 TO 5 P M.

PHYSIOLOGICAL BOTANY.

I State what is known of the substance called *diastase*, and show what influence it has in the germination of seeds.

II. When the sap is first taken from the *toddy palm*, it is sweet, after awhile, if it is exposed to the air, it becomes intoxicating, while if it is left a longer time still, it becomes sour. Explain the causes of these changes.

III. What are *albuminoids*, and where are they found in plants?

IV. It is rare that the ovules are fertilised by the pollen of the same flower. Describe some of the more common contrivances by which this is prevented.

V What is a *saprophyte?*

TUESDAY, 19TH JANUARY, 10 A.M TO 1 P M.

BOTANY · DEVELOPMENT

I Describe the anatomy of a root. In what respect does it differ from that of a stem?

II. Describe the *prothallium* of a fern and the organs of reproduction which it bears

III. Give a short account of the life-history of one of the following plants, illustrating your description by means of drawings if you can:—*Torula*, *Penicillium*, or any *Moss*.

IV. Trace the different stages in the development of a stamen from the time that it consists of meristem only to its perfect condition.

V. Describe accurately the several structures, which enter into the composition of a *fibrovascular-bundle* in any monocotyledon.

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

BOTANY. ECONOMIC, GEOGRAPHIC AND HISTORICAL.

I. What plants yield the more important *cereal* and *pulse* crops of Southern India?

II From what plants and from what parts of them are the following articles of commerce obtained?—

Cocao, ginger, vanilla, mace, quinine, gamboge, senna, kamala.

III. What regions of the globe do the following plants chiefly inhabit?—

Umbelliferæ, Coniferæ, Date-palm, Sargassum.

IV. There are some plants which are common to the highest parts of the Nilgiris and to the Himalayas, but which do not grow in the intermediate plains. How do you account for these plants growing in such widely separated districts?

V. Give a short account of the labours of Dr. Roxburgh or Dr. Wight.

VI. Where and when did Linnæas live? Describe shortly the principles upon which the *System* was founded that goes by his name.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

ZOOLOGY.

I. Describe the visual organs in the Mollusca.

II. Contrast the spinal column in—

(*a*) Cyclostomata,
(*b*) Ganoidæ,
(*c*) Frog and in Mammalia.

III. Give the dental formation of—

(*a*) the Bear,
(*b*) the Badger,
(*c*) the Cat.

IV. Describe the Rodentia and name the different families into which they are divided.

V. Describe the lungs, pleuræ, and air-sacs in birds; in what birds are the air-sacs absent? What is their use.

VI. Describe the lymphatic System in Fishes.

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

ZOOLOGY.

I. Describe the circulation in a Fish, and contrast it with that of Reptiles.

II. Describe Hemiptera, and in what do they differ from other divisions of Insecta.

III. What are the sub-classes of Hydrozoa, and by what characters are they known from each other?

IV. Describe the method of reproduction in the Actinozoa.

V Describe the variations in the structure of the forelimb in (*a*) Man, (*b*) Dog, (*c*) Ox, (*d*) Tapir.

VI. What Fishes have an electrical apparatus? Describe it in the torpedo; and from what structures is it originally developed?

THURSDAY, 21ST JANUARY, 10 A.M TO 1 P.M.

ZOOLOGY.

I. What do you understand by (*a*) development, (*b*) metamorphosis, (*c*) retrograde development? And give familiar illustrations

II Mention the primary sections of the Vertebrata according to Huxley, with their special distinguishing features.

III Give the dental formula for a typical ruminant animal; what families are included under the group Ruminantia? And note the essential difference between a sambur and an antelope.

IV. How are locomotion and respiration effected in the Echinoidæ? Have Echinoderms a true blood-vascular system? Which is the most highly organised order?

V. What are the general characters of the Protozoa, and describe the reproductive phenomena in the class Gregarinidæ.

VI. Refer the Scorpion to its proper order and class; describe its respiratory system and poison apparatus; wherein does the latter differ from that of the common spider?

VII Classify—Seal, bat, frog, cat, man, oyster, sponges, sparrow, shark.

THURSDAY, 21ST JANUARY, 2 TO 5 P.M.

PALÆONTOLOGY.

I. What do you understand by "Unrepresented time"? Explain the important part it plays in the Palæontological Record, and give examples of it.

II. Mention cases of the sudden extinction of animals in geological time, and explain some of the causes of disappearance of fossils from sedimentary rocks

III. What evidence can you adduce for, or against, the theory of the progressive succession of organic types? State the case fully

IV. Characterize fully the leading families of the order Thecophora, and give sketches of their special differences.

V. Name some principal genera representing the Arachnidæ in Palæozóic times, and give their zóological characteristics.

VI. Describe fully and illustrate the structure and mode of reproduction of the Zoantharia Sclerodermata.

VII. Characterize the genera named below, and give their position in the zöological and geological scales:—Ophiurus, Asaphus, Tentaculites, Ceratites, Cephalaspis, Dicynodon, Zeuglodon, Trogontherium.

VIII. Describe the Pre-carboniferous Floras, and state the botanical affinities of the several genera you may name.

IX. Name (at least generically) and characterize the fossils laid before you, and give their position in Geological time.

N.B.—The numbers marked on the fossils must be quoted in each case

---

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

PHYSIOLOGY.

I. Describe the structures concerned in secretion of urine, and what effects are produced on the action of the kidneys—(*a*) by section of the spinal cord below the medulla, (*b*) stimulation of spinal cord below the medulla, (*c*) section of renal nerves.

II. What is glycogen. How is it formed, and what are its uses in the animal economy.

III. Describe the crystalline lens. What changes take place in it during accommodation of the eye for near and distant objects, and how are these changes brought about?

IV. Describe the method by which the pressure of blood in an artery has been determined, and describe the instruments used.

V. Describe the sympathetic nervous system in man, and state what are its functions.

VI. Describe the development of the teeth in mammalia, and contrast it with the development of the same structures in fish.

FRIDAY, 22ND JANUARY, 2 TO 5 P.M.

COMPARATIVE PHYSIOLOGY.

I. In what order of Molluscs are the Sensory organs best developed? Do you consider nervous organisation dependent upon advanced circulatory apparatus or *vice versâ*. Give your reasons.

II. Name the elements which go to make the "Carapace" and "Plastron" of the tortoise. What is the tortoise-shell of commerce?

III. What inferences regarding the nature and habits of an animal would you draw from the following description of it:—

(*a*) Strong and well-developed swimming apparatus;

(*b*) Strong and well-developed bony arch supporting forelimbs;

(*c*) Strong and well-developed bony plates in the sclerotic (coat of eye);

(*d*) Large pupil and great width of orbits;

(*e*) Wide mouth, long jaws, many pointed teeth.

IV. Sketch the progressive morphology of the Tænidæ using the recognised terminology.

V. Discuss the question as to whether nervous energy is essential to the processes of nutrition and secretion in animals.

VI. What is a cold-blooded animal? What evidences are there of the generation of heat in the class generally, and to what special function do you attribute the evolution of heat in insects? Give examples.

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M.

ANIMAL AND COMPARATIVE PHYSIOLOGY.

I. Describe what changes take place in living voluntary muscle after long-continued contractions?

II What do you mean by automatic and reflex actions and what circumstances determine the nature of the latter as to character and intensity?

III. Explain the meaning of a sexual reproduction, and give examples of the various forms in which it occurs?

IV. How is the heat of the body generated, and describe how it is maintained and regulated?

V. What is the composition of gastric juice, and describe what its effects are in the digestion of the various classes of foods?

VI. Describe the manner in which the circulation of the lymph is carried on, and state what effect the nervous system has on it in man or any of the lower animals. What circumstances affect the quantity or quality of lymph?

SATURDAY, 23RD JANUARY, 2 TO 5 P.M

COMPARATIVE PHYSIOLOGY.

Subject for Essay—The mouth with prehensile appendages.

Trace generally the progressive development of the oral cavity from its most rudimentary to its most perfect form, noting adaptations for special aliment and instances of reversion, if any, from a higher to a lower type.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P M.

PSYCHOLOGY:—*Hamilton and Mill.*

I. State the several senses in which the doctrine of Relativity has been held by philosophers; and shew why Hamilton cannot be said, according to Mill, to have adopted the doctrine in any important sense of the term. State also your own opinion on this controversy with reasons.

II. (*a*) Enunciate, explain and examine the Law of the Conditioned, stating clearly the arguments adduced by Hamilton in its support, with Mill's criticism of the same. Illustrate the law from the controversy regarding the cognition of the Absolute between Hamilton and Cousin.

(*b*) Summarise the view taken by Mansel on the question of the cognoscibility of the Absolute with Mill's 'indignant refutation' of the same.

(*c*) Discuss the applicability of the Law of the Conditioned to the proof of the Law of Causation as understood by Hamilton.

(*d*) Bain remarks that Hamilton anticipated the Law of the Persistence of Force in his theory of Causation. Is this view tenable?

III. "When we know what any philosopher considers as revealed in consciousness, we have the key to the entire character of his metaphysical system." What are the revelations in consciousness according to Hamilton, H. Spencer, Bain and Mill? Show the logical connection between the view of each philosopher regarding this revelation and his metaphysical system.

State and examine the ultimate criteria of truth as maintained by Hamilton and by Mill.

IV. Discuss the following points:—

(1) Mill it may be said takes no account of the relation of the possibilities of sensation or feeling among themselves?

(2) With reference to the existence of other minds, Mill accepts a sphere out of the consciousness of the individual?

(3) Whether the attribute of succession as between sensations is given in the sensations themselves or annexed to them by a law of the mind?

(4) Any of our senses, or at all events any combination of more than one sense, would be sufficient to give us an idea of matter?

V. Describe briefly the cases of men born blind adduced by Hamilton in support of his theory of extension. Are these cases sufficient for a decision on the point? If not, shew what other evidence is required for a conclusive determination of the question?

VI. State and exemplify the law of suggestion.

What are, according to Mill, the conditions, physical and mental, required for the growth of an Inseparable Association?

VII. State and examine the views of Hamilton, Mill and G. H Lewes regarding the existence and function of 'unconscious mental modifications.'

VIII. Examine each of the following extracts from the standpoints (1) of Hamilton and (2) of Mill:—

(1) There are no degrees of intensity in cognition; the intensity is a matter of feeling concomitant with cognition.

(2) Agreement, difference, time, representation and power, these names are general expressions to designate the relations cognized in every act of knowing.

(3) There is no generalization without abstraction, but the latter is possible without the former.

(4) That pure empiricism leads naturally to scepticism is a fact which has been familiar to certain schools of thought ever since Hume presented it to the world stripped of its plausibilities.

(5) Not only is the undisputed existence of what we know as 'will' confounded with its disputed spontaneity, but this disputed spontaneity is further confounded with undisputed voluntariness of conduct.

MONDAY, 18TH JANUARY, 2 TO 5 P.M.

SPENCER'S PRINCIPLES OF PSYCHOLOGY.

I. Mention the most important differences between (*a*) the nervous system of Vertebrata and of Invertebrata, (*b*) the brain of Mammals and that of other Vertebrata, (*c*) the brain of Man and that of the other Mammals.

Show how the evolution of the nervous system and the evolution of mind conform respectively and concomitantly to the laws of progressive integration, increasing heterogeneity, and increasing definiteness.

II Expound and criticize Mr. Spencer's view as to the nature of the nerve force. What objections are there to the identification of it with Electricity?

III. Tonicity of the muscles is explained by Mr. Spencer and Dr. Bain as being due to the continuous discharge from the motor centres. How is this continuous discharge accounted for by those two writers, and what is your own opinion?

IV. On the question whether mental energy is correlated with the various forms of physical energy, what opinion does Mr Spencer entertain?

Supposing the correlation to exist, what special difficulties lie in the way of its being satisfactorily proved? Supposing it should some day be proved that mental energy is not correlated with the physical energies, how would this discovery affect the great principle of the conservation of energy?

V. Examine the grounds on which it has been alleged by some that Psychology is not a distinct science. Mr. Spencer holds that Psychology has stronger claims than any other science to be regarded as a distinct science On what grounds? How is Psychology related, in Mr. Spencer's opinion, to the sciences most nearly allied to it?

VI. What is the precise nature of the "primordial unit of consciousness," out of which all mental states may be supposed to have developed? What bearing has it on the existence and the nature of a reality beyond consciousness?

VII Explain, and, criticize where you do not agree with them, the following statements:—

(*a*) The most relational of feelings and relations are the most revivable and associable.

(*b*) The saying of Democritus that all the senses are modifications of touch, modern science goes far to confirm.

(*c*) The first extension of the correspondence between the organism and its environment in Time is necessarily coeval with its first extension in Space.

VIII. How do sense organs originate and how are they developed according to Mr. Spencer? Which of the senses are the earliest to appear in the animal kingdom?

What relation subsists between the impressibilities or directive elements and the activities or executive elements in the organism? What is the physiological foundation of that relation?

IX. How would you account for the growing seriality of psychical changes?

X. What is the law of the growth of Intelligence, according to Mr. Spencer? Briefly sketch the evidence in support of the law. What objections do Intuitionalists urge against it, and what weight do you attach to those objections? In what respects does Mr Spencer's statement of the law differ from that of ordinary experientialists?

XI. It is commonly held that, other things being equal, improvement in Memory proceeds *pari passu* with improvement in registration of experience. Mr. Spencer holds that as soon as the structural registration or organization of experience is perfected, memory disappears.

Discuss these questions.

XII. Sketch briefly the doctrine known as Phrenology. Examine the arguments urged against it by Mr. Spencer, and state your own opinion with regard to Phrenology considered (1) as a substitute for Psychology, and (2) as an auxiliary to Psychology.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P.M.

MILL'S LOGIC.

I. Is the analysis of common language as important a preliminary enquiry for a logician like Hamilton, who says that Logic deals with "thoughts," as it is for a logician like Mill, who holds that it deals with "things"?

Are abstract and proper names connotative or non-connotative?

How are relative names strictly so-called to be defined? What are the chief causes of ambiguity regarding them?

II. What different views have been entertained as to the purpose of the Aristotelian Categories?

What was the distinction between First substance and Second substance?

III What is the cosmological theory expounded by Mill in the chapter entitled "Of the things denoted by Names"? Compare it with the cosmological theory advocated in his *Examination of the Philosophy of Sir William Hamilton*. How do you explain the appearance of a cosmological theory in a logical treatise?

IV. Discuss the grounds on which Mill excludes so-called "Immediate Inferences" from the sphere of Inference. Point out the connexion between difference of opinion on this point and difference of opinion with respect to the fundamental character of Logic.

V. Describe the operation called "Induction by Simple Enumeration," pointing out the manner in which it differs from genuine

scientific induction, the nature of the conclusion it leads to, and the circumstances in which it may or must take the place of scientific induction.

VI. Examine what Mill calls "heteropathic effects" in the light of the principle of the conservation of Energy.

VII. "We must not be too scrupulous," says Herschel, "as to *how* we reach to a knowledge of general facts: provided only we verify them carefully when once detected, we must be content to seize them wherever they are to be found."

Is this in strict accordance with Bacon's rule? Justify your answer.

VIII. Compare the laws of Induction and the laws of Deduction (*a*) as to their necessity, (*b*) as to the evidence on which they rest.

IX. Are we confined to any particular properties as the basis of a classification? What are the respective merits and demerits of the obvious and the unobvious attributes? When are the ends of scientific classification best answered? Will the same properties answer when the end is practical as when it is scientific?

X. What are the conditions necessary in order that Mental phenomena be made a subject of scientific enquiry, and how far are those conditions satisfied?

What is the logical character of Ethology, and how is it related to Psychology?

XI. Describe the Inverse Deductive or Historical Method. Distinguish between the Abstract Deductive Method and the concrete Deductive Method, and point out the main circumstance which renders the former inapplicable to the science of society.

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

JEVONS' PRINCIPLES OF SCIENCE.

I. "I adopt," says Jevons, "the opinion of Mr. Herbert Spencer that logic is really an objective science like mathematics or mechanics." Discuss the question whether logic is an objective or a subjective science and compare the views of Hamilton, Mill and Spencer.

II. How does Jevons show that every disjunctive term is the negative of a corresponding combined term and *vice versâ*?

Apply Jevons' method.

(1) to obtain $a = b$ from $A = B$;

(2) to prove the mood *Cesare*;

(3) to prove the *modus tollendo ponens*;

(4) to show that if $A = BC \dotplus bc$, then $a = Bc \dotplus bC$.

III. How does Jevons defend Perfect Induction against the charge that it gives no new information?

Does he admit that Imperfect Induction advances our knowledge? Summarise his teaching on this point.

IV. "Francis Bacon held that science should be founded on experience, but he mistook the true mode of using experience, and in attempting to apply his method, ludicrously failed . . . . . It is a great mistake to say that modern science is the result of the Baconian philosophy. It is the Newtonian philosophy and the Newtonian method which have led to all the great triumphs of physical science, and I repeat that the *Principia* forms the true *Novum Organum*."

Write notes explanatory and critical on the above.

V. "Facts may be classed under four heads as regards their connexion with theory, and our powers of explanation." State, explain and exemplify the four classes.

VI. What does Jevons understand by Reasoning by Generalisation? How does it differ from Induction; and how does he distinguish it from Reasoning by Analogy?

VII. How does Jevons criticise the following:—

(1) Aristotle's doctrine that singulars cannot be predicated of other terms;

(2) Hobbes's requisite of a Hypothesis that it should be conceivable and not absurd;

(3) De Morgan's statement that "by degree of probability we really mean or ought to mean degree of belief;"

(4) Whewell's notion of classification by Type;

(5) Huxley's definition of the process of Classification;

(6) Spencer's doctrine that a classification is complete if it has a place for every existing object.

VIII. Explain and exemplify :—

(1) "Blind experiment;"

(2) "Integrated Variations;"

(3) The "Method of Compensation" as a means of eliminating error;

(4) "Accidental exceptions" to known laws of nature

IX. What is the parallel which Jevons draws between nature and a ballot-box. Discuss the question how far the analogy holds and whether in drawing the parallel Jevons is consistent with himself.

WEDNESDAY, 20TH JANUARY, 10 A.M TO 1 P.M.

EPICTETUS AND MARCUS AURELIUS.

I. What are the chief points of doctrine or practice held in common by the early Christians on the one hand, and the later Stoics as represented by Epictetus and Marcus Aurelius on the other? Did Stoicism unconsciously borrow these from Christianity, or *vice versâ*, or were they derived by both from the common heritage of truth possessed by the age? Discuss the point.

II. What are the chief features of Stoicism (*a*) which made it acceptable to the Roman character, (*b*) which placed it in harmony with the political and social needs and aspirations of Imperial Rome?

III. Give an exposition and criticism of the opinions of Epictetus and Marcus Aurelius regarding the Moral Faculty, arranging your matter as far as practicable under the following heads:—(1) Its origin, whether original or derivative, (2) its ultimate constitution, whether simple or complex, (3) its psychological character, whether intellectual or emotional, or what, (4) the grade and source of its authority.

IV. State clearly and with some detail the conception of Nature entertained by Epictetus and Marcus Aurelius. How was the notion suppose to originate—intuitively or from experience? How did this conception come to have the intimate bearing on conduct which it is known to have had on the Stoic system.

V. What were the relations of Epictetus and Marcus Aurelius to the popular religion?

How is the attitude of Marcus Aurelius towards Christianity to be harmonized (*a*) with the character of the man and (*b*) with his philosophical tenets?

VI. The ethical end, says Marcus Aurelius, in certain passages, is "tranquillity" or "equanimity." Compare this with "happiness" as conceived by advanced Utilitarians of the present day.

VII. Taking an optimistic view of the universe how did Marcus Aurelius deal with the problem of the existence of evil, and what do you think of his mode of treatment?

VIII. What do you gather as to the views of Epictetus and Marcus Aurelius regarding a future life and immortality? How, in harmony with their system, would they have dealt with the doctrine that a future life and immortality are necessary postulates of man's moral nature? What estimate did Marcus Aurelius form of the value of posthumous fame?

IX. Explain and criticise the oft repeated statements "that the nature of good is in the use of appearances, and the nature of evil likewise, and that things independent of our will do not admit either the nature of evil or of good."

X. What are the means on which Epictetus lays most stress in the formation of one's own character and in the moulding of the character of the young?

XI. It is a favourite saying of Marcus Aurelius that "as every soul is unwillingly deprived of the truth, so it is unwillingly deprived of justice and temperance and benevolence and everything of the kind."

By whom was this doctrine previously propounded? Examine it. What is the main conclusion of a practical nature which Marcus Aurelius draws from it?

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

BENTHAM'S ETHICS.

I (*a*) What was the formula in which Bentham first enunciated the principle of utility? What formula did he afterwards substitute for this, and for what reasons?

(*b*) What other ethical principles does Bentham contrast with the principle of utility? State and criticise his characterization of these.

II. Bentham gives (1) psychological classifications of pleasures and pains, respectively; (2) a classification of them as sanctions of conduct; (3) an enumeration of the circumstances on which the value of a pleasure or a pain depends. (*a*) State each of these and point out its use in the construction of a system of moral rules. (*b*) Criticise (1) and (2). (*c*) With respect to (3), examine the assertion that Bentham's hedonistic calculus is entirely a quantitative one.

III. (*a*) Bentham expresses the distinction between Morality and Legislation by saying that "they have the same centre, but not the same circumference." Explain this.

(*b*) Explain why it is that, if Morality and Legislation have, as Bentham says they have, the same object, they do not coincide.

IV. In his *Deontology*, Bentham says:—

(*a*) "To obtain the greatest portion of happiness for himself, is the object of every rational being. Every man is nearer to himself and dearer to himself than he can be to any other man."

(*b*) "The principle on which Deontology is grounded is the principle of utility; in other words, that every action is right or wrong—worthy or unworthy—deserving of approbation or disapprobation, in proportion to its tendency to contribute to or to diminish the amount of public happiness."

What then do you suppose would be Bentham's answer to the question: 'Why should a man conform himself to the rule of utility?'

V. Sidgwick argues that, if it be true as Bentham seems to think, "that, on the occasion of every act he exercises, every human being is led to pursue that line of conduct which, according to the view of the case taken by him at the moment, will be in the highest degree contributory to his own greatest happiness," Egoistic Hedonism has no claims to be considered a moral theory at all. Examine this.

VI. (*a*) Government may be regarded either as a positive good, or as a necessary evil. Which is the view that Bentham takes and on what grounds?

(*b*) If the law is not what it ought to be; if it openly combats the principle of utility; ought we to obey it, or

ought we to disobey it? What is Bentham's answer or what would be your answer?

VII. Bentham divides the evil results of a wrong action into evils of the *first*, *second* and *third* order; and similarly the good results of a right action. Explain and illustrate.

VIII. It is evident that the same quantum of happiness might be distributed either more abundantly among a smaller number or more sparingly among a larger number.

How does Bentham, or how would you, settle between the conflicting claims of these alternatives?

IX. Explain the distinction made by Bentham between "self-regarding and extra-regarding prudence?"

X. Mill says: "It is fortunate for the world that Bentham's taste lay rather in the direction of Jurisprudence than of properly ethical enquiry." And he adds, with respect to Bentham's *Deontology*, "a book scarcely ever alluded to by any admirer of Bentham without deep regret that it ever saw the light."

(*a*) What is the history of the publication of the *Deontology*? (*b*) Give the grounds of the above criticisms, or your own reasons for agreeing or disagreeing with them.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

POLITICAL ECONOMY.

I. (*a*) Explain how far the statement that "high prices make high wages" is true or the reverse.

(*b*) Explain how it is that a general rise of wages, when it involves a real increase in the cost of labour, influences values.

II. What is it that determines the relative values of (1) articles jointly produced by the same process, *e.g.*, beef, hides and tallow; (2) agricultural products capable of being grown on the same soils, *e.g.*, cotton and cholum?

III. Explain how an increase of population will influence (*a*) Rents, (*b*) Profits, (*c*) Wages, in a country where capital has ceased to increase.

IV. (*a*) Explain how it is that an increase in the demand of a country for *any* foreign commodity compels her, *cæteris paribus*, to pay more dearly for *all* foreign commodities

(*b*) Discuss how far the vast imports of silver into India in recent years have influenced prices, and note any of the reasons why that influence has been less than might have been expected.

V. Explain the *origin* of the large drafts made on India each year by means of Council Bills, and trace the *effect* of these drafts on the export and import trade of India.

VI. State what consequences would probably result to the industries and export trade of India from the discovery of rich and extensive gold mines in India.

VII. Explain the economic functions of the Bank of England as distinguished from other English Banks. How far has it any counterpart in India?

VIII. A country with a purely metallic currency resolves on a great issue of notes. Trace the consequences on—

(1) its foreign trade;

(2) its productive capital;

(3) the currency of other countries.

IX (*a*) What are the elements of value which determine the *fluctuations* in the prices of foreign bills?

(*b*) If next year's harvest in England fails and a great export of wheat from India follows, how would this tend to affect the price of bills of exchange between London and India and the profit on the export of English manufactures to India, and why?

X. (*a*) It is possible that to meet the increased expenditure now being incurred in guarding the N. W. Frontier the Government of India may be obliged to re-impose the income-tax in the next budget. Discuss the advantages and disadvantages of an income tax with special reference to the circumstances of India. Ought incomes from land to be taxed at a different rate from professional incomes, and traders profits?

(*b*) Examine, on economic principles, the charge that is sometimes made against Lord Lytton's Government, that, by removing the import duties on cotton goods, it sacrificed the interests of the Indian tax-payers to those of the Manchester manufacturers.

THURSDAY, 21ST JANUARY, 2 TO 5 P.M.

POLITICAL ECONOMY.

I. What are value and price; on what conditions depends the increase or decrease of value and price?

Illustrate your answers by instances drawn from two of the following:—

(*a*) The Lancashire Cotton Famine of 1863.

(*b*) "The History of the Corn Laws" of the first quarter of the present century.

(*c*) The present state of the Silver Question as compared with the same in 1864-65.

II. "Demand and supply are independent economic forces." How would you refute this doctrine, styled a fallacy by Mr. Cairnes, in the case of—

(*a*) a tight money market,

(*b*) the variable rate of discount of commercial banks,

(*c*) a glut of Manchester goods in the market.

III. "Free Trade limits industries, drains a country of its wealth, and lays it at the feet of foreign capitalists."

(*a*) Explain clearly the meaning of each of the above complaints brought forward by Protectionists;

(*b*) Criticise the Protectionist theory, taken generally, and besides viewed specially in connection with the growing industries of India.

IV. State from what principle Trades-Unions proceed, and what the various methods are practically, by which it is carried out. What suggestions does Mr Cairnes offer in connection with the Malthusian theory?

V. Criticise Mr. Cairnes' refutation of Adam Smith's assumption that "employers are permanently conspiring to keep wages down."

VI. How far would you support Ricardo's doctrine, that profits are inversely as wages. To what extent do Mr. Harrison's and Mr. Brassey's views coincide with or differ from Ricardo's theory.

VII. "Excess of exports over imports is the measure of commercial profit of international trade;" "Excess of imports over exports is the measure of profit of international trade."

Explain clearly the grounds of the two seemingly paradoxical doctrines, and then state your own opinion on the subject with the reasons for that opinion.

VIII. "The gain on foreign trade is identical with the profit on capital invested;" "The gain on foreign trade is gauged by the profit secured by merchants."

Explain and clearly define the difference of the two sentences given.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

HISTORY.

The History of the Macedonian Empire and the kingdoms that arose out of it from the time of Alexander to the Conquest by Rome.

I. Relate all such circumstances regarding the boyhood of Alexander, his training and education, as appear to have exercised an influence upon and given shape to his after career. Specially remark upon and account for the Grecian sympathy and sentiment which make themselves so apparent in his character.

II. What "fatal imprudence" were the Persians guilty of at the very commencement of Alexander's invasion of the East? What was the policy advised by Memnon the Rhodian as against Alexander after he had landed in Asia? Pursue the course of Alexander's progress from this time, indicating the measures and acts of opposition advised or enforced by Memnon up to his (Memnon's) death.

III. Give a concise account of the siege of Tyre by Alexander. Show that, from the Geographical, Commercial and Political im-

portance of their city, the Tyrians were justified in hoping that they might baffle the arms and power of Alexander What were the considerations that induced Alexander to intermit at this time his pursuit of the fugitive Darius?

IV. State the disposition of the provinces of Alexander's great Empire made upon his death. Trace the course of events from this time forward to the new partition that took place in 301 B C

V. Of Alexander it is said—"So passed from the earth one of the greatest of her sons; great above most, for what he was in himself, and not as many who have borne the title, for what was given him to effect. Great, not merely in the vast compass, and the persevering ardour, of his ambition ..... but in the course which his ambition took, in the collateral aims which ennobled and purified it, so that it almost grew into one with the highest of which man is capable, the desire of knowledge and the love of good. In a word, great as one of the benefactors of his kind."—*Thirlwall.*

A very different view of Alexander and his ambition has, perhaps justifiably, been taken by other historians. State it and discuss the points raised, specially with reference to the *collateral aims*, which, in the above-quoted view, *ennobled and purified* his ambition.

VI. Explain the circumstances under which Ptolemy Ceraunus came to be king over Macedonia in 280 B.C.; and narrate the history, (1) of the irruption of the Gauls in 279 B.C. by which he (Ptolemy Ceraunus) was defeated and slain, and (2) of the final settlement of the invaders in the province of Galatia.

VII. To which of the original subdivisions of Alexander's Empire did Parthia and Bactria belong? Relate the circumstances by which these became independent kingdoms. Give a short outline of the history of the latter and summarize what is known of its connection with the early History of India.

VIII. Tabulate all those important events of the reigns of Antiochus Epiphanes of Syria and of Perseus of Macedonia which show the periods of their reigns that synchronize, and narrate the rest of the reign of the survivor.

IX. "The Achæan League, which became so celebrated, and earned the melancholy honour of giving a name to the whole of Greece, when it was reduced into a Roman Province, was founded

on the recollections of earlier times, but was called into being by the wants and miseries of the period in which it arose."

Taking the above as your text, briefly narrate, (1) The "wants and miseries of the period" that gave existence to the League, (2) The historical facts which made it to be "so celebrated," (3) The circumstances which led to its overthrow by Rome

---

FRIDAY, 22ND JANUARY, 2 TO 5 P M.

CONSTITUTIONAL HISTORY OF ENGLAND FROM WILLIAM III. TO 1867.

I. (*a*) In what respects did the Bill of Rights differ from the Declaration of Rights? How did the Act of Settlement still further supplement these? Has there been any modification in the terms of the latter?

(*b*) Since the Revolution, "the work of legislation, of strictly constitutional legislation, has never ceased; a long succession of legislative enactments stand out as landmarks of political progress no less in more recent than in earlier times. But alongside of them there has also been a series of political changes, changes of no less moment than those which are recorded in the Statute-book, which have been made without any legislative enactment whatever. A whole code of political maxims, universally acknowledged in theory, universally carried out in practice, has grown up?" Illustrate by a few examples the "conventional code" to which Dr. Freeman refers in the above passage.

II. *The Crown*:—

(*a*) Is our present monarch an *elective* sovereign or otherwise?

(*b*) Hallam remarks with reference to the Revolution and the subsequent constitutional changes, "except in one article, we cannot say, on comparing the Bill of Rights with what is proved to be the law by Statutes, or generally esteemed to be such, that it took away any legal power of the crown." And again, "changes

have been in operation, some of which have greatly enhanced the authority of the crown, or rather of the executive." What is the "one article" referred to in the first extract? How would you illustrate the second statement?

(*c*) What was George III's theory of "kingship" and describe the policy adopted by him to give effect to it. Would such a policy be possible at the present day?

III. *House of Lords:*—

(*a*) What powers, functions or privileges are peculiar to the House of Lords?

(*b*) Analyse the composition of the Upper House with a view to illustrate the different principles underlying the right to a seat in the House.

or

(*b*) "The House of Lords, in truth, is not only a privileged body, but a great *representative* institution." Justify this statement.

(*c*) State precisely the constitutional question at issue in the Wensleydale peerage case. How was it decided and on what grounds?

IV. *The House of Commons:*—

(*a*) Give a brief account of the evils and abuses which the Reform Bill of 1832 was passed to remove.

(*b*) Of this Bill it has been said that "not founded upon theoretical views of equal representation, it had not assumed to frame a new constitution." Justify this remark by giving the leading features of the Bill and pointing out wherein it was defective. What measures since passed have remedied some of these defects?

(*c*) Under what Act is the duration of Parliament fixed? Summarise the arguments that may be employed in favor of its repeal or modification. How is the duration of Parliament affected by the death of the sovereign? By what Act is such a contingency now governed?

(*d*) Party divisions have been styled the "sinews of freedom." What have you to say in justification or otherwise of this position?

or

(*d*) "The Lower-house of Parliament, as it is still deemed, in formal rank, has become the *ruling power* of the nation." How far is it consistent with truth to say that this House now possesses the *executive* power in the kingdom?

V. Briefly describe the character and privileges of Municipal Corporations in England before the Reform Bill of 1832. Give the substance of the "Corporations Act" 1835. Were its terms applicable throughout the kingdom?

or

V. "Since the days of their Saxon ancestors, England's sons have learned, *at their own gates*, the duties and responsibilities of citizens." Show how this is still true by a brief sketch of the system of local self-government obtaining in England.

VI. Give a brief summary of the terms of the Act of Union between England and Scotland, and discuss the equity of the settlement from the Scotch point of view.

VII. Relate the circumstances social, religious and political which rendered advisable the union of Great Britain and Ireland. Summarise the more important terms of the Union and point out any changes that have since taken place.

VIII. (*a*) What is meant by a "crown colony" and the theory of colonial "responsible government." Illustrate your answer.

(*b*) Trace in outline the chief events in the constitutional history of New South Wales, giving a short description of the existing machinery of Government.

or

(*b*) Write a short abstract of the case of Chapman *v.* Hall, referring to the more important constitutional principles laid down in Lord Mansfield's judgment

IX. Selecting any *two* of the following, explain fully what is meant:—*appropriation of supplies, vote of credit, civil list, three-cornered constituency, courts of quarter session.*

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P. M.

SUBJECT OF ESSAY.

Either of the following at the option of the Candidate.

(a) Whether it is possible to resolve all the generally received laws of association into a single law.

(b) The psychological dispute between Conceptualism and Nominalism.

SATURDAY, 23RD JANUARY, 2 TO 5 P M.

SUBJECT OF ESSAY.

Technical Education viewed in relation to the needs of this Presidency, and the economical conditions of its success.

B. L. DEGREE EXAMINATION, 1886.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M.

EVIDENCE.

I. A, claiming to be heir of X, the last holder, sued B to recover a Zamindári.

A to prove his title tendered in evidence a judgment in a suit in which he had successfully sued Z to recover certain movables which he claimed under the same title:

Is this judgment admissible in evidence?

Give reasons for your answer.

II. The Zamindár of A admitted in writing that the Zamindár of B had the sole right of fishery in a river flowing between A and B.

A was subsequently sold at a Revenue sale and bought by Z.

Z attempted to fish in the said river, was resisted and brought a suit to establish a right of fishery against the Zamindár of B

Is the abovementioned admission evidence against Z

Give reasons for your answer.

III. The admission of a partner, made after dissolution of partnership, in regard to the business of the firm previously transacted, has been held to be admissible against the other partners.

On what grounds does this decision rest? By what rule of the Evidence Act would this question have to be decided?

IV. Is the admission of a criminatory fact coupled with a denial of guilt made by an accused person to a policeman admissible in evidence against the accused?

Give reasons for your answer.

V. A reference to arbitration having been agreed to by A and B, proceedings before arbitrators were held, but no award was passed. A then sued B, with reference to the same matter and proposed to prove that B offered to compromise the claim for a certain sum of money before the arbitrators.

Can B object to this evidence?

Give reasons for your answer.

VI. Suppose a policeman extorts a confession by torture from a prisoner which leads to the discovery of stolen property, can any portion of such confession be proved against the prisoner?

Give reasons for your answer.

VII P, O and E jointly charged N, S and M with assault and N with robbery of a watch from P on the same occasion. N called A as a witness. A swore the watch belonged to M, who had lent it to S, in whose possession it was found by the police.

P cross-examined A. The complaint was dismissed. P and A died.

N sued O and E for damages for malicious prosecution.

M sued S for the watch.

Can the plaintiff in either case use the deposition of A as evidence?

Give reasons for your answer.

VIII. On whom does the burden of proof lie in the following cases? and why?

(1) Suit on a bond reciting consideration, defendant admits execution but denies consideration.

(2) Suit by Hindu son against his father for partition of family property. Son claims a moiety of a Government Promissory note for 10,000 Rs. standing in the name of his deceased paternal grandmother; the note was kept in the family chest. The father denies that it is partible

(3) Suit by a Hindu widow to set aside a sale of a house made by her to her deceased husband's brother on the ground that the price was not a fair one.

IX What privileges, if any, can be claimed by the following persons if called as witnesses:—

1 Magistrates.
2 Married persons.
3 Bankers.
4 Priests.
5 Policemen.
6 Solicitors.

X. What powers are given by the Evidence Act to Courts to prevent waste of public time by practitioners in the examination of witnesses?

XI. In what ways may the credit of a witness be impeached?

XII. What limits are placed to a judge's power to put questions to a witness?

MONDAY, 18TH JANUARY, 2 TO 5 P M

CONTRACTS.

I. When is the communication of a Proposal, and Acceptance, and a Revocation respectively complete? Is the contract complete in the following cases:—

(1) A on a proposal made by B wrote and posted a letter of acceptance. A subsequently telegraphed recalling the letter of acceptance. The letter and the telegram reached B at the same time.

(2) B offered to sell a house site to A for Rs. 1,000. A said "I'll give you Rs. 950." B declined to take that price. A then agreed to give Rs. 1,000?

II. What elements beyond the usual essentials of a contract are necessary to constitute the contract of sale of goods?

III. Describe the effects which the revocation of an agent's authority has upon the rights and liabilities of (*a*) the principal (*b*) the agent, (*c*) third persons.

IV. What are the guiding principles in awarding damages for breach of contract? Give an illustration or two.

V. Are the following agreements void, and if so, why?

(*a*) A agrees to sell B "a hundred tons of oil."

(*b*) A agrees to let lodgings to B, a prostitute.

(*c*) A agrees to pay Rs. 5 a month to B as long as A holds a Government appointment, procured for him through B's interest.

(*d*) A agrees to pay B a commission for collecting several gambling debts due to A.

VI. Explain the following expressions:—

Liquidated Damages, Necessaries, 'del credere' Agents, Legal tender, Caveat Emptor, Bailment, Time as the essence of the contract.

VII. What is the effect of the stoppage in transit in regard to the title to the goods?

VIII. Describe the right of lien, and state the several cases in which it exists.

IX. In what classes of sales is there an implied warranty? What is the remedy for the breach of warranty, where the specific goods sold with the warranty have been delivered and accepted?

X. Certain agreements made without consideration are not void. What are they, and what formalities are required to render them contracts?

XI. What rights have co-sureties in respect of (*a*) one another (*b*) of the principal debtor.

XII. Are all the members of a Firm liable for the fraud of one of the partners?

TUESDAY, 19TH JANUARY, 10 A.M TO 1 P M.

TORTS.

I. Distinguish a tort from a crime, and from a breach of contract; and state when a distinction between a tort and a breach of contract becomes material.

II. (*a*) What must a plaintiff prove in an action for—

(1) false imprisonment.
(2) malicious prosecution.
(3) malicious arrest.
(4) malicious conviction.

(*b*) What are the defences available in an action for—

(1) Assault and battery.
(2) Libel.

(*c*) A bailiff wilfully declines to arrest a debtor on mesne process. The debtor escapes in consequence of the bailiff's default. The creditor sues the bailiff for

damages on the ground of his failure to perform his duty. Has the bailiff any defence? Give reasons in support of your answer.

III. (*a*) Explain what is meant by—

(1) Trover, (2) Replevin, (3) Recaption, (4) Waiver of tort, (5) Slander of title, (6) Trespass *ab initio*.

(*b*) What is the effect of the ratification of a wrongful act as against the person ratifying?

IV At a certain market A makes slanderous imputations against B s character. No special damage ensues. C, a proprietor of a newspaper, publishes a report of what happened giving out the name of A as the person that made use of the defamatory language. Are A and C, or either of them, liable to an action by B. Give reasons and state the authority on which you rely.

V. Compare the decision in Nichols *v.* Marsland with that in Rylands *v.* Fletcher and state the distinguishing circumstances between the two cases on which the decisions are based.

VI. (*a*) Distinguish an easement from a right of common, and state the methods by which a right to an easement is acquired and those by which it is destroyed.

(*b*) What are the conditions which must be fulfilled for the acquisition of a valid patent right.

VII. A obtained from B a plot of ground for cultivation in 1850 under a lease terminable at will. Soon after obtaining the lease, A cut a channel through a portion of the land for carrying water to his neighbouring land. The tenancy was put an end to in 1875, but A continued in enjoyment of the use of the channel till 1884 when B filled up the channel. A forthwith files a suit against B for the restoration of the channel on the basis of prescriptive right. How will you decide? Give reasons.

VIII (*a*) When, if at all, is an employer liable for the wrongful act of his contractor.

(*b*) What is the liability, if any, of a person whose wrongful act has caused damage which is, however, shown to be such as would necessarily have ensued owing to other circumstances. Cite if you can, any decided case in support of your opinion.

IX (*a*) A deposits jewels with B. B gambles them away to C. A sues C to recover the same. How will you decide? Give your reasons.

(*b*) A purchases a house from B paying a much higher price for it than it would otherwise have fetched, on account of its commanding a sea view Soon after the sale, B builds up on his adjoining land so as to shut out the view altogether. Has A any, and what remedy?

X A, a merchant of X, uses a trade-mark on his goods manufactured at X knowing that such trade-mark is the property of B, a manufacturer of similar goods at Y. B has no intention of trading at X. B sues A at X to restrain A from using B's trade-mark. How will you decide? Give reasons.

XI. A, a passenger, on alighting from a train, is requested by a porter in the service of the Railway Company, to take charge of his luggage. A, having pressing business to attend to, goes away saying that he would turn up in a few minutes and returns accordingly But in the meantime the luggage is missing. A sues the Company for damages. How will you decide? State your reasons.

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

CRIMINAL LAW.

I (*a*) Define—

(1) "Judge," (2) "Counterfeit," (3) "Voluntarily," (4) "Valuable Security."

(*b*) Give the essential ingredients of the following offences —

(1) "Mischief," (2) "Criminal trespass," (3) "Forgery," (4) "Extortion."

II. (*a*) What are the elements common between, and peculiar to, each in the following sets of offences.—

(1) Theft and Criminal misappropriation of property.

(2) Criminal misappropriation of property and Criminal breach of trust.

(3) Criminal breach of trust and Cheating.

(*b*) Mention the aggravated forms of the following offences: (1) Hurt, (2) Wrongful confinement, (3) Kidnapping.

III Consider the legality or otherwise of the following sentences:—

(*a*) A, having been convicted and sentenced under a special law, is subsequently convicted and sentenced by a Magistrate upon the same facts under the Penal Code. Is the second sentence legal?

(*b*) A is sentenced to rigorous imprisonment for one year and one day. The Court directs that 3 months out of this period be passed in solitary confinement. Is the direction as to solitary confinement legal?; if not, amend the direction so as to make it legal.

(*c*) A on the first count is convicted of an offence punishable with 7 years rigorous imprisonment and fine under Chapter XVII of the Indian Penal Code. He is also convicted on a second count of having been convicted of a similar offence on a previous occasion. He is sentenced to rigorous imprisonment for 6 years on the first count, and for 7 years on the second count. Is the sentence on the second count legal? if not, amend the sentence.

IV. (*a*) When is a Court precluded from passing a sentence of imprisonment beyond 24 hours?

(*b*) When is a Court bound to pass a sentence of death?

(*c*) When is a Court bound to pass a sentence of transportation for life?

V. What are the special provisions of the Penal Code which bear on the conduct or acts of persons standing in the relation of husband and wife?; and in what respects, if at all, does the Common Law of England differ from the Indian Law upon this subject?

VI. A requested B, a servant of C, to keep the outer door of C's house open on a certain night and thus aid him (A) in committing adultery with C's wife. B reported the matter to C, who told him to comply with A's request, so that C might have an opportunity of punishing A. B keeps the door open. A comes, as arranged, and gets into the house. C, who was lying in wait, seizes A and gives him a severe beating in consequence of which A's

shoulder bone is fractured. Are A, B, C, guilty of any, and what offence or offences. State reasons.

VII. A, a married woman, requests B, her maidservant, to induce C to visit her (A) for the purpose of illicit intercourse. B goes to C's house but does not find him. B writes a letter to C urging him to visit A for the said purpose, and leaves it with a servant of C with directions to deliver the same to C. The servant forgets and the letter is not delivered. Are A and B, or either of them, liable to be convicted under the Penal Code? ; and if so, for what offence or offences. Give reasons.

VIII. (*a*) State the point or points of difference between the English and Indian law on the subject of the offence of

(1) Cheating.

(2) Attempting to commit an offence.

(3) Culpable homicide not amounting to murder.

(*b*) What are the points decided in Lord George Gordon's case.

IX. A, a Zamindar makes default in payment of revenue. An Officer entrusted by the Collector of the District with the process for the distraint of the movable property of A, arrives at A's station. B, the Dewan and manager of A, without the knowledge or consent of A, gets up a party of 100 men headed by C and D for the purpose of resisting and expelling the officer by force. C, in resisting the officer, beats him and fractures his skull. Are A, B, C, D, or any, and which of them, punishable under the Code, and for what offence or offences?

X. Briefly discuss how far, if at all, will a plea of intoxication or contributory negligence avail an accused.

XI. A, to gratify his revenge against B, writes a sale-deed on an old stamp paper to the effect that B has sold his house to A for a consideration of 1,000 Rs. and subscribes to the document the name of B as if signed by him. A then learns that he cannot make any use of that document without registration and he destroys the paper. Has A committed any, and what offence or offences. Give reasons.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

CIVIL AND CRIMINAL PROCEDURE CODE.

I. In what cases is evidence receivable by affidavit, and in what cases has the other side the right to cross-examine the declarant?

What are the principal requisites of an affidavit?

II. Mention four instances in which a decree may be passed against a party without a trial and adjudication on the merits.

During the course of the trial of a suit, the Court ordered a party to deposit Rs. 100 as fee for a Commissioner to make a local investigation. The party failed. For the said default, the Court passed a decree against him. Was the procedure correct?

III. What is the liability of a legal representative in execution proceedings,

(*a*) when the original defendant died, and he was made a party before decree:

(*b*) when the defendant died after decree, and he was then brought in.

IV. In what cases is a judgment-debtor once discharged not liable to rearrest.

In what cases may the judgment-debtor be discharged though the whole of his debt has not been recovered.

V. (1) What is the remedy for an irregularity in the sale

(*a*) of movable property,

(*b*) of immovable property.

(2) What do you understand by the term irregularity? Should the property be sold as moveable or as immovable property when

(*a*) it is a hypothecation bond,

(*b*) it is a leasehold interest.

(3) What property may be sold without a sale proclamation?

VI. State any six matters that may form the subject-matter of enquiry in execution proceedings.

May the following matters be enquired into in execution proceedings:—

(1) A obtained a decree against B for sale of property in satisfaction of a debt due. B's son intervenes and

contends that the debt was incurred for immoral purposes, and that his interest should therefore be excluded.

(2) A money decree was obtained against the father. The son intervenes during attachment and contends that the property is his self-acquisition.

(3) A Muhammadan female obtained a decree for maintenance. In execution, the husband (defendant) contends that since the decree he has divorced her.

VII. (1) What rules govern the Appellate Court as to the reception of evidence not adduced in the Court below?

(2) Is it open to a Respondent to present a memo. of objections under Section 561 of the Civil Procedure Code as a pauper?

(3) If an appeal is withdrawn, how would a memorandum of objections be affected by the withdrawal?

VIII. In what cases may a Magistrate acquit an accused without trial? What is the proper course for setting aside an order of acquittal? Has the High Court any, and what power, as a Revisional Court in cases of acquittal?

IX. Mention three irregularities which will not vitiate the proceedings of a Magistrate, and three which will render the same void.

X What privilege is given to a European prisoner in the matter of appeal which is not given to a native?

In what case is a European amenable to the jurisdiction of an authority in the mofussil exercising criminal powers, who is not himself a European British subject?

XI. In what cases may a Police Officer arrest without a warrant or order from a Magistrate? May a Police Officer himself and unconditionally discharge a person arrested by him if he is satisfied that no offence was committed?

XII. In what cases is the public prosecutor entitled to reply? Does his right arise

(*a*) when the accused simply puts in evidence some documents when the prosecution witnesses are

being examined, but at the close of the case for the prosecution he says he does not mean to call witnesses :

(*b*) when on the close of the first day he said he had witnesses and the public prosecutor then summed up, but the next day when the case was taken up, he said he had no witnesses.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

EQUITY JURISPRUDENCE.

I. What are the general rules laid down in the Specific Relief Act by which Courts are to be guided in granting or refusing perpetual injunctions ?

II. Under what circumstances may an instrument be rectified by the Court ?

III. "There is a distinction in Courts of Equity as to the parties in whose favour the provisions of marriage articles will be specifically executed or not" (Story). What is the distinction ?

Compare the Indian Law on the point.

IV. A, B and C members of an undivided Hindu family offered to buy certain land from D for 10,000 Rs. D demanded 12,000 Rs. A, the managing member, told D that B and C would not consent to give more than 10,000 Rs. knowing that they were willing to give 12,000, if necessary. D was thus induced to sell for 10,000 Rs. Before registration of the sale deed, D ascertained the truth and refused to deliver possession. Can A, B, C enforce the contract of sale ? Can D deliver possession and sue for damages ?

Give reasons for your answers.

V. By deed, A settled 10,000 Rs. on trust to pay the interest to B, a spinster, for life, and after her death on trust to pay the fund to all and every or such of B's children as she might by will or deed appoint, and in default of such appointment to pay the fund to C.

B married. Having no children B joined with C and called upon the Trustees of the Settlement to pay the fund to herself and C in equal moieties. Should the Trustees comply with this demand ?

Give reasons for your answer.

VI. "Courts of Equity have not confined the doctrine of compensation or lien for improvements to cases of agreement or of joint purchases." To what other cases does Story refer? Are there any similar rules in Indian Acts?

VII. A contracted to sell to B a house in Madras for 10,000 Rs. The day after this contract was made, the house was destroyed by an earthquake. Can A compel B to pay the price?

Give reasons for your answer.

VIII. A, knowing that B had orally contracted to buy a house in Madras for Rs. 50 from C, induced C to sell the house to him for Rs. 60, registered his sale deed, and took possession, by getting the tenant of the house to attorn to him. A subsequently gave the tenant notice to quit. At this juncture B learnt what had happened and claimed possession from the tenant at the expiry of the term of the notice to quit given by A.

Is the tenant bound to deliver possession to B?

Give reasons for your answer.

IX. What are the provisions in the Transfer of Property Act as to the exercise of a power of sale conferred on a mortgagee by the deed of mortgage? What does Story say on the subject?

X. Under what circumstances does a mortgage to secure future advances take priority over a subsequent mortgage of the same property? Compare the rules laid down in the Transfer of Property Act with the rules stated by Story on the subject.

XI. By whom besides the mortgagor may a mortgage be redeemed?

XII. What are the rights and duties of a mortgagee in possession?

THURSDAY, 21ST JANUARY, 2 TO 5 P M.

HINDU AND MUHAMMADAN LAW.

I. Name the several schools of Hindu Law with their subdivisions if any, stating how they came to have distinct existence and mentioning two principal authorities in each school.

II. Is adoption valid in the following cases :—

(1) when the adoptive mother does not consent to adopt,

(2) during pollution of the adoptive parents.

(3) Permission given to adopt *a* son. The adopted son died (*a*) a bachelor, (*b*) leaving a widow. The mother adopts another son.

(4) By a male of 15 years of age.

(5) By a widow aged 17.

(6) Of an orphan given away by his sister's husband professing to act under the orders of the orphan's father.

III. (1) State the distinction between obstructed and unobstructed heritage, and the incidents distinguishing each and the class of cases covered by it.

(2) State, with reasons, whether the following are ancestral property or not.

(*a*) Maternal grandfather's property inherited through the mother.

(*b*) What was inherited by the father as his maternal grandmother's stridhanam.

(*c*) What fell as share in partition.

(*d*) What was devised by the father to the son.

IV. State the strict Mitakshara Law regarding the natural rights between the father and the son in ancestral and self-acquired movables and immovables, and the extent to which it now prevails.

Can the father make an unequal distribution of his self-acquisitions among his sons ?

V. Explain the terms Sapinda, Gotrajâs and Bhandhus, and state who are the heirs denoted by the terms in the Mitakshara, Mayukha and Dhaya Bhaga.

State who is the preferential heir in each of the following sets, pointing out the distinction, if any, between the several schools.

(1) Father's father's brother's son *or* father's brother's daughter's son.

(2) Great-grandson of deceased's great-great-grandfather, or father's sister's son.

(3) In a divided family, full brother's son or half brother.

(4) In a divided family, half brother or first cousin.

VI. State how the Law protects the interests of a child in the womb, in anticipation of

(*a*) partition :

(*b*) alienation (testamentary and otherwise) :

(*c*) adoption.

VII. Who are the heirs whose consent would be sufficient to validate an alienation by a widow ?

What do you understand by *waste* by a widow, and under what circumstances would a declaratory suit be maintainable ?

VIII. When property is sold in execution of a decree obtained against a widow, what are the principles which determine whether the interest of her minor son passes, and whether the reversioners are bound by the sale.

IX. Mention three fundamental principles of Malabar Law and two of Alyasantana Law.

Compare the rights of the junior members of the family to maintenance.

(*a*) under the ordinary Hindu Law,

(*b*) under Malabar Law,

(*c*) under Alyasantana Law.

X. Explain what is meant by *Increase*, *vested* inheritance, *exigible* dower and *waqf*.

XI. Describe the extent of the testamentary powers of a Muhammadan, and the right of a Muhammadan female to dower.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

GENERAL JURISPRUDENCE.

I. How far are moral duties recognized and enforced by the Positive Law ?

II. Does the Law look to the motives from which an act proceeds or only to the character of the act done ? If an act in itself lawful be performed with a bad motive, will it render it illegal ?

III. What is to be done where several persons have an equal and exclusive right to one and the same thing?

IV. Within what limits may a person himself enforce a right without seeking judicial assistance?

V. "Words are merely a means to an end, and if an intention contrary to the meaning expressed by them can be proved, effect must be given to this intention rather than to the words used." What are the exceptions to this rule in the interpretation of private instruments?

In the construction of Statutes what is the rule known as "Noscitur a Sociis"?

VI. Taking judicial decisions as a source of Law, state when they are binding, and when they are not?

VII. When does a new Law not operate to repeal an older law dealing with the same subject?

How can a law that contains a clause to the effect that it shall last for ever be repealed?

VIII. State the guiding principles as to whether the representatives of deceased persons can or cannot sue and be sued as such.

IX. Instance cases where a person is not free (1) to renounce or (2) alienate his rights.

X. How can the ordinary consequences of delay in the performance of an obligation be purged or cured?

XI. Write a short note demonstrating how the age, the sex, and the health of persons affect their rights and duties.

M L. DEGREE EXAMINATION, 1886.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M

EVIDENCE.

I Compare the Indian and English Law as to the relevancy of judgments obtained against a third party to prove the existence of a right or custom

What are the principal Indian Decisions on the question ?

II A was charged with receiving stolen goods. Evidence was admitted to show that at the time he received these goods, the receipt of which was admitted, he had other stolen goods in his possession.

B was charged with abetting C in the forging of a Bank note Evidence was tendered to prove that fifty pieces of paper purporting to be similar forgeries in different states of progress were found in B's possession, and rejected.

Upon what grounds do these decisions rest ?

III. Distinguish between the effect of statements made by an occupier of land in disparagement of his own title and of those which, made by the same party, merely go to abridge or encumber the estate itself.

Illustrate your answer by examples.

Is there any difference in the English and Indian Law as to the relevancy of such statements ?

IV. On what grounds have entries made in the books of deceased rectors or vicars as to the receipt of tithes been admitted in evidence in favour of their successors ?

V. A cut B's throat with a knife.

In answer to questions put by a magistrate to B in hospital, B made certain signs and then died. Can these questions and signs be proved against A under any, and, if any, what provisions of the Evidence Act.

VI. By section 30 of the Evidence Act it is provided that under certain circumstances the confession of one prisoner can be used against another prisoner.

Upon what grounds does this rule rest?

What are the principal points decided by Indian Courts on this section?

VII. Compare the English and Indian Law as to the relevancy of a statement made by a deceased person.

(*a*) as to the cause of his death:

(*b*) in the ordinary course of business:

(*c*) as to the existence of relationship between deceased persons.

VIII. In 1884 a Full Bench of the High Court at Allahabad held that a confession made to a Police Officer which led to the discovery of stolen property was relevant. One of the judges dissented. Give a short summary of the arguments on which the judgment of the dissenting judge is based, and of the arguments *contra*.

IX. In a suit by A against B, A, in proof of a public right of way, produced two judgments (1) obtained by A against B (2) obtained by B against C.

B alleges that both these judgments were obtained by fraud. Is it open to B to prove this?

Give reasons for your answer.

X. "Parol Evidence is not admissible to contradict or vary a written contract."

How does the Evidence Act modify or limit this rule?

XI. (*a*) Is there any difference between the English and Indian Law as to the presumption of legitimacy from birth during marriage?

Give reasons for your answer.

(*b*) "The statement of a judge as to what took place at the trial is conclusive."

How far is this rule adopted by the Evidence Act?

XII. "With respect to all questions put to a witness on cross-examination for the purpose of directly testing his credit, it may be broadly laid down that, if the questions relate to relevant facts,

the answers may be contradicted by independent evidence, if to irrelevant, they cannot."

To what extent has this principle been adopted in the Evidence Act ?

MONDAY, 18TH JANUARY, 2 TO 5 P M

CONTRACTS.

I Give the reason for the rule that the communication of an acceptance made by post is complete as against the proposer when the letter of acceptance is put into the Post Office for transmission to the proposer.

II. "There is no branch of the law of sale more confusing to the student than that of delivery. This results from the fact that the word is unfortunately used in very different senses." State what those different meanings are.

III. In what circumstances can an agent personally enforce contracts entered into by him on behalf of his principal ?

IV. Set forth Lord Holt's classification of bailments in the case of *Coggs* v. *Bernard*. How does the Indian Law differ from the English in respect to a bailee's negligence ?

V. What was decided in *Mitchell* v. *Reynolds* and *Lickbarrow* v. *Mason*.

VI. What rights has an unpaid vendor in actual possession of the goods, when he has relinquished his lien ?

VII. A, knowing of a fraud, elects at first to treat the transaction as a contract. Can he rescind it on discovering a new incident in the fraud ?

VIII. A agrees to pay B money upon the consideration that B will give evidence in a civil suit on behalf of A. Why should this agreement be held void ?

Is an agreement between two persons not to bid against each other at an auction legal ?

IX. Show the limits within which commendatory statements by the vendor, or depreciatory statements by the purchaser will not render a sale voidable for fraud or misrepresentation.

X. Define an Indemnity and a Guarantee according to the Indian Contract Act. What description of contract is an Insurance?

XI What is legal tender in this country? Is payment by cheque an absolute payment?

XII A frequent contract among merchants is a sale of goods "to arrive" but the incidents differ according to the particular terms used. Now what is the import of the bargain

(1) where the language is that goods are sold "on arrival per ship A or ex ship A"

(2) where the language asserts the goods to be on board the ship named as, "1170 bales now on passage and expected to arrive per ship A"

(3) where the sale describes the expected cargo to be of a particular description as "400 tons of Aracan Necrinsie rice," and the cargo turns out on arrival to be rice of a different description?

XIII. The illustration usually given of a "spei emptio" in Roman Law is that of a fisherman who agrees to sell a cast of his net for a certain price. Give your reasons for stating whether this in English Law would be a contract of sale or a contract for work and labour done.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P.M.

TORTS AND CRIMINAL LAW.

I. (*a*) Explain what is meant by

(1) Profits á prendre.

(2) Manorial customs.

(3) Disturbance of market.

(*b*) Explain the nature of the following remedies, and state under what circumstances they will be granted?

(1) Prospective damages.

(2) Damages by estoppel.

(3) Mandamus.

II. A is an editor of a newspaper. He receives a letter from B containing defamatory matter against the character of C. The letter

is written under circumstances which make it a privileged communication. A, without any malice or intent to injure C, but through mistake and negligence puts the letter into a cover addressed to his manager and containing other papers for publication. The letter is published. C sues A for libel Is A liable? Give reasons.

III. A is the owner of an ancient tank. Owing to extraordinary floods the tank is breached, there being no negligence on the part of A in maintaining the bunds. B, a neighbouring landowner, seeing that a great volume of water was rushing towards his land fences it off, in consequence of which the water rushes in a greater quantity than it would otherwise have done, against a railway embankment, the property of C (a railway company). The embankment being in imminent danger of being washed away, the servants of C cut several trenches in the embankment, in consequence of which the water rushes on to D's land and destroys his crops. State whether D has any remedy against A, B, C. Give your reasons, and cite the authorities, if any, in support of your answer.

IV. (*a*) What is the liability, if any, of a landlord to his tenant, and of both or either of them, to third parties regarding damage resulting from the premises leased to, and occupied by the tenant being out of repair?

(*b*) What were the points decided in,

(1) Decrespigny *v.* Wellesley,

(2) Scott *v.* Stansfield? and what is the Indian statute which bears on the subject of the 2nd case?

V. Explain the doctrine of "Merger of trespass in felony." State what is the English and Indian law upon the subject, noticing the authorities, if any, in support of your answer.

VI. A, B, and C are several owners of adjoining houses. A and C are at enmity with each other and B's house is situated between theirs. Each of the houses has an ancient well. All the wells have a common subterranean source of supply whose course is undefined. A digs his well deeper in consequence of which the water of B and C's wells is considerably drawn off to A's well unnecessarily without a sufficient supply being left for the ordinary and reasonable use of B and C who are thus compelled to fetch water from a great distance. C, in revenge turns the sewage water of his house into his own well in consequence of which the little quantity of water that was available in B's well is rendered unfit for any use. State whether there

is any remedy for any, and which of the said individuals and against whom? give reasons.

VII. A takes certain land for cultivation from B on a lease for a long term of years, B reserving to himself a right to keep and shoot game on the land. B, not choosing to exercise the right reserved for his own benefit, does not shoot for a long time in consequence of which, the game gets overstocked on the land which by feeding and otherwise injures the crop on the land. A sues B for damages. How will you decide, and by what reasons will you support your judgment?

VIII. A is convicted before a Sessions Court of theft in a dwelling house (an offence punishable with imprisonment of either description for seven years and fine). A is also convicted on a second count of being an old offender previously convicted of a similar offence. The Court sentenced A on the 1st count to rigorous imprisonment for 6 years and a fine of Rs. 2,000 and in default of payment, to a further term of 2 years rigorous imprisonment; and on the 2nd count to rigorous imprisonment for 6 years. The Court further commuted the several sentences to a single sentence of transportation for 14 years. Are the several sentences as well as the commuted sentence legal? if not, state in what respects, and why they are illegal, and amend them just so far as is necessary to remove any legal objection.

IX. Compare the law of England with that of India as regards the liability of an accused to conviction when he has made two contradictory statements on oath, but there is no evidence forthcoming as to which of such statements is untrue. Briefly comment upon the point or points of departure of the Indian law from the English, noticing the important and leading English and Indian cases upon the subject.

X. A, a Zemindar, makes default in payment of revenue. The Collector of the District issues process for distraining the movable property of A. B, the officer entrusted with the execution of the process, arrives at A's station. B, the Dewan and manager of A without the knowledge or consent of A, gets up a party of 100 men headed by D, E and F to resist and expel B by force. B also gets up a body of 100 men headed by X and Y to aid him in the execution, opposing force to force. A contest ensues. D, being severely wounded, goes and sits aloof and takes no further part. E repents and cries aloud to his party, imploring them to desist from further

action. But, notwithstanding, F fractures the skull of X, and Y of C. Are all or any, and which of the persons specially named above, punishable under the Penal Code, and for what offence or offences and why?

XI. A, a witness in the course of giving evidence before a Court of Justice on oath, states that he is the Zemindar of Chittagong, a distant country. The statement is made simply for gratifying his own feeling of vanity and has no bearing on the case under trial, such a Zemindar, in point of fact, not existing at all. The Court doubting the statement of A, he produces a bundle of receipts purporting to be granted to him as the Zemindar of Chittagong, for payment of revenue made by him for a series of years. The receipts also bore the names of several Collectors which A had subscribed in spurious imitation of their several signatures. Has A committed any, and what offence or offences under the Penal Code? State your reasons.

XII. A, a merchant, offers to B, a Magistrate, who is trying a criminal charge against A's son, a ring set with a false stone for Rs. 1,000 without making any representation as to the quality of the stone, but with full knowledge of the fact that the ring was only worth 100 Rs. B believes the stone to be valuable and the ring worth 1,000 Rs. but offers to pay only Rs. 100, feeling assured that A will not venture to refuse under the circumstances. A pretends to yield to official pressure in the interest of his son, and accepts the 100 Rs. and parts with the ring. State what offence or offences, if any, have A and B severally committed. Give reasons.

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

HINDU AND MUHAMMADAN LAW.

I. Enumerate, and state briefly the provisions of the Enactments which have

(*a*) secured the administration generally of Hindu and Muhammadan Law and usage,

(*b*) supplemented, infringed or preserved either of the said Laws, in the following points:—

(1) Forfeiture of estate, inheritance or maintenance, for change of religion,

(2) Re-marriage of widows,

(3) Age of majority,

(4) Validity of wills,

(5) Waqf.

II. Trace the origin of the right of primogeniture in Hindu Law and state what the full extent of the right was, and in what cases and for what purposes it now exists?

In the case of an estate enjoyed by one member at a time, and governed by the rule of primogeniture, who is the preferential heir,

(*a*) when the last holder leaves a son and an undivided brother (who is senior in age to the son):

(*b*) when the last holder was a daughter, and at her death there are two grandsons of her father, one, the elder, by a predeceased junior daughter, and the other, the younger, by the daughter who was the last holder:

(*c*) when at the death of the last male holder there are

(1) a son adopted during the lifetime of the first wife,

(2) a son by the third wife,

(3) a son by the second wife, the ages of the several sons being in the order above given.

III. Describe the early law as to partition, and state when, by whom, and under what circumstances it could be brought about?

Can the grandson compel his grandfather to divide, while his father is passive or unwilling?

IV. Explain the practice of *niyoga*, and that relating to the appointed daughter. What existing doctrine or principle owes its origin to either?

V. The following is the list of heirs enumerated by Yajnavalkya:—The son, the wife, daughters, both parents, brothers and likewise their sons, Gotrajas, Bhandhus, and a pupil and a fellow-student. Name the several heirs who have been since recognized in addition, assign to them their proper place, and state by what authority or decision the right and position of each were established.

VI. Give Yajnavalkya's definition of stridhanam, and show how far and why the Madras and Privy Council decisions have departed from the same?

VII. (1) How far can a person abrogate or renounce the ordinary law of inheritance ?

(2) Are the following customs valid,

(*a*) peculiar descent,

(*b*) no partition in family,

(*c*) family estate inalienable,

(*d*) no adoption in family.

(3) Wherein does the difference lie between family custom and territorial custom as regards (*a*) proof, (*b*) renunciation.

(4) What is the nature of the custom called *Illatom*

VIII. Explain the doctrines of survivorship and representation and show how the latter affects the former.

Where there was originally a partial division between some members of a family, and at a subsequent period a division is sought in reference to the then existing members, how far would the doctrine of representation be applicable ? Illustrate your answer by an example.

Does survivorship obtain in the following cases :—

(*a*) among illegitimate sons of a Sudra,

(*b*) among nephews taking uncle's estate by inheritance,

(*c*) among sons of a Brahmin woman by a European,

(*d*) among co-widows or daughters who enjoyed definite shares by mutual arrangement sanctioned by Court.

IX. Is there any difference between the Hindu and Muhammadan Law as to the legitimacy of a child begotten before wedlock ?

What is the effect of an acknowledgment by a Muhammadan father, when the issue is the result of an adulterous intercourse ?

X. Explain fully the doctrine of *Return*, and state in what cases it operates.

Is the widow entitled to the Return in preference to or in competition with the distant kindred ?

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

REAL AND PERSONAL PROPERTY.

I. Write a short description of the several estates in land known to the English Law.

II. Distinguish between a joint Tenancy and a Tenancy in common. What was decided in *Morley* v. *Bird* ?

III. What are the rules as to perpetuities laid down in the Transfer of Property Act ? Compare them with the English law.

IV. When is an interest in property said to vest ?

V. Explain the doctrine of Merger, and state the facts and ruling in *Sury* v. *Pigot*.

VI. The Transfer of Property Act declares that "immovable property" does not include "standing timber, growing crops, or grass." What is the English law as to these being "interests in land" within the meaning of the 4th Section of the Statute of Frauds ?

VII. What is understood by a "lease" (*a*) in English law; (*b*) in the law of India ?

Under the Transfer of Property Act if A lets a farm to B for the life of C, and, when C dies, B continues in possession with A's assent, B's lease is declared to be renewed from year to year. Why is this ? What notice is necessary to determine B's lease, and how must it be given ?

VIII. State the requisites for a valid gift in India (*a*) of movable property (*b*) of immovable property. How far is an universal donee liable for the debts of the donor ?

IX. What are privileged Wills, and who may make them ?

X. How will the following bequests take effect under the Indian Succession Act ?

(*a*) A bequeaths lands to B in trust to receive the rents and pay them to C for her life. B dies in A's lifetime.

(*b*) A bequest of property to A for his life, and after his death to the eldest son for life, and after the death of the latter to his eldest son. A has no son at the time of the testator's death.

(c) A bequest of a fund to A for life, and after his death to B for life, and after B's death to that one of B's sons who first attains the age of 25. A and B survive the testator.

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

CIVIL AND CRIMINAL PROCEDURE CODE.

I. (1) In what cases is leave necessary under the Civil and Criminal Procedure Codes for instituting or defending a suit or complaint?

(2) Is the sanction of the Court necessary in any and what cases for withdrawing or compromising a Civil or Criminal case?

II. (1) To what branch of Law does *Res Judicata* appertain? Account for the insertion of it in the Civil Procedure Code.

(2) Is the Law of *Res Judicata* in any way less stringent towards the plaintiff than towards the defendant? Illustrate your answer by examples.

(3) Would the force of *Res Judicata* attach if the first suit in which the same question was litigated between the same parties was decided after the institution of the second suit but before the trial therein?

(4) Does the principle of *Res Judicata* apply to orders in execution? Give reasons for your answer.

III. What are the provisions of the Civil Procedure Code against splitting a claim? Are the following suits open to any objection:—

(1) A executes to B a bond for Rs. 600, and another for Rs. 35. After B's death, his son and representative sues A in one Court on the bond for Rs. 600, and in another Court on the Small Cause Side on the bond for Rs. 35.

Would it make any difference if both were claims in the nature of Small Causes, but were sued for at different times?

(2) Through the negligence of A, B's carriage was broken and B also suffered personal injury. B

sued A first for damages in regard to the injury to the carriage and obtained a decree. He institutes a second suit for damages in consequence of injuries to his person.

(3) Plaintiff first sued to recover immovable property from which he had been improperly ejected, and then sues to recover from the same defendant movable property which had been wrongfully detained by him.

(4) The family property consisted of lands, movables and debts. The plaintiff first sued for a partition of the lands, and then sues for his share in the movables and debts.

IV. What is the effect and object of a notice to produce and admit documents, given by one party to another? give the form of a notice to admit and of an affidavit in reply to a notice to produce.

V. State the cases in which the Civil Procedure Code

(1) declares a decree final which would otherwise be appealable,

(2) takes away the right of a future suit,

(3) reserves a remedy by regular suit

VI. A obtains a decree against a person who has (1) a salary of 50 Rs. from his employer (a Zamindar): (2) a decree debt of Rs. 100 passed by another Court against a third person; and (3) the reversionary interest in a certain estate after the death of a Hindu widow. State whether all or any of these can be attached in execution of A's decree, and describe the process of attaching and bringing the same to sale.

VII. Draw up (*a*) the decree in a redemption suit, (*b*) the decree in a foreclosure suit, (*c*) the plaint in a suit for libel, the words not being libellous in themselves.

VIII. (1) Is there any difference in the effect of a sale held in execution of a decree obtained on a hypothecation bond, and in that of a private sale made by the hypothecator himself?

(2) State in what cases a regular suit will lie to set aside a sale of immovable property, and in what cases relief can be had only in execution proceedings?

(3) A sale takes place when the decree is barred by limitation. Is the sale valid?

(4) Does a sale in execution of a decree which is subsequently reversed, convey any right, and if so, in what cases?

IX. Mention four instances in which the inferior Criminal Courts are required to lay their proceedings before the High Court and that Court has to dispose of the same (not in the regular exercise of its appellate or revisional jurisdiction).

X. In what cases may a Magistrate order the attachment and sale of property, and in what case may he issue an injunction?

May property be distrained or sold for fine notwithstanding the award of imprisonment in default?

XI. In what cases is there an appeal though tried summarily; and in what cases no appeal notwithstanding conviction and sentence?

XII Is there any irregularity in the following cases:—

(1) A Magistrate who could award imprisonment for 6 months and fine, imposes only fine, and in default awards imprisonment for 3 months.

(2) In a case punishable with fine alone, he imposes a fine of 100 Rs. and in default, rigorous imprisonment for 6 months.

(3) In a case tried summarily, he imposes besides imprisonment for 6 months, a further period of imprisonment, in default of payment of fine.

(4) In a case tried summarily, he awards solitary confinement.

(5) The original charge was for a different offence. The Magistrate was of opinion that the facts alleged would only constitute assault. He tried the accused for that offence, and acquitted him. He then directs the complainant to pay compensation to the accused on the ground that the charge was frivolous.

(6) A District Magistrate revises the proceedings of a Magistrate of the first class and orders further enquiry in the case.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

EQUITY.

I. (1) Are there or were there any Courts in India in which equitable claims or pleas could not be advanced?

(2) Describe the nature of the fusion which has taken place in England between Equity and Common Law, noticing the cases in which exclusive jurisdiction still exists in equity and the grounds for the same.

(3) Give six instances in which Indian enactments contain provisions of equity promiscuously with provisions of law.

II. (1) Do the English doctrines as to the following points apply to India:—

(*a*) Mortgage by conditional sale.

(*b*) Where the third mortgagee pays off the first mortgage with notice of a second mortgage, he cannot rely on the first mortgage.

Briefly describe the views entertained by the several High Courts and how and when the principles applicable to India were settled.

(2) Distinguish between consolidation of mortgages and tacking. Does the doctrine of tacking still exist in India?

III. Describe the circumstances under which a prior mortgagee will be postponed to subsequent incumbrancers.

State whether in the following cases he will lose or retain his priority.

(1) A, the manager of a Company executed a mortgage of his property to the Company and handed over the title deeds to them. The deeds were placed in a safe of the Company, which had only one lock having duplicate keys, one of which was entrusted to A as manager. Some time afterwards A took out of the safe the title deeds except the mortgage, and handed them to B, to whom at the same time he executed a mortgage for money advanced to him by B without notice of the Company's mortgage.

(2) A prior mortgagee had asked for the deeds which the mortgagor who was his Solicitor made excuses for not giving to him. The mortgagor afterwards deposited the title deeds with another mortgagee as security for money advanced without notice of the first mortgage.

(3) A mortgaged land to B. B having bought certain land from C, pledged his mortgage deed to C to secure the unpaid purchase money. C gave the deed to A, who was his brother-in-law. A represented to D that the mortgage was redeemed and sold the land to him giving him the mortgage deed as a title deed. B sues to recover the mortgage amount by sale of the land in D's hands.

IV. Explain the Executor's right of retainer.

(1) If an Executor asserts in his lifetime a right of retainer but dies without having exercised it, may his representative exercise that right, and if so, in what cases?

(2) May an Executor or Administrator retain for himself out of the assets a debt, which if he were an ordinary creditor he could not have enforced

(*a*) for want of a writing as required by law, (*b*) for lapse of time?

(3) Is one of several Executors entitled to a right of retainer in respect of a mortgage debt due from the testator to a body of Trustees, of whom that Executor is one?

V. (1) Distinguish between ministerial and discretionary Trusts.

(2) What are the requisites for a valid declaration of trust in English Law, and what for a dedication of property to an idol in India?

VI. (1) Suppose a testator to appoint two Trustees with the usual power of appointment of new Trustees. A Trustee dies in the lifetime of the testator. Can the surviving Trustee appoint a new Trustee?

(2) When a power of appointing new Trustees authorizes the continuing Trustee or Trustees to appoint a new Trustee or Trustees in the place of a Trustee or Trustees becoming unwilling to act, can a sole con-

tinuing Trustee appoint another in the place of the Trustee who desires to retire? Should the retiring Trustee join in making the appointment?

(3) Does the Executor of an Executor or the Administrator of an Administrator represent the estate?

VII. Distinguish between marshalling of assets and marshalling of securities, and give the provisions of the Transfer of Property Act on the latter.

Where A has mortgaged to B certain property and then sells a portion to C, is B bound to enforce his mortgage against that portion which was not sold to C?

VIII. State the general principles of English law as to the incidence of debts on real and personal estates respectively.

A testator by a deed executed in his lifetime assigned his real and personal estate to Trustees in trust for himself during his life, and after his death to sell and convert the property and pay out of the proceeds all debts due by him and funeral expenses, &c., and then upon trusts for his children. By his will, after reciting the deed, he bequeathed the residue of his real and personal estate to his wife for life with remainders over. Compare—

(1) the relative liability of the personal and real estate for the debts:

(2) the relative liability of the personal estate comprised in the deed and of that not so comprised.

IX. In what cases is an injunction grantable by the Indian law, and in what, not?

Contrast the scope of the relief by specific performance with that of relief by injunction.

Are there any cases in which an injunction will be granted though the Court cannot decree specific performance?

Will an injunction issue to restrain

(*a*) an unfair use of a judgment,

(*b*) the expelling of a member of a club,

(*c*) the publication of letters of private or literary character,

(*d*) a person from making slanderous oral statements calculated to injure the business of another person?

X What points were decided in the following cases —

Penn *v* Lord Baltimore.

Clayton's case

Sloman *v* Walter.

Scott *v* Tyler.

In what enactments of the Indian Legislature have the principles decided by them found place.

THURSDAY, 21ST JANUARY, 2 TO 5 P M

MERCANTILE AND MARITIME LAW.

I (1) If a master signs Bills of Lading for goods never shipped, can an innocent endorsee for value of the Bills of Lading recover from the owner?

(2) If a chemist sells his shop, can he set up business again in the same neighbourhood?

(3) If A grants to B and C jointly (1) a ship (2) a race horse (3) a locomotive steam engine and B dies. Does C take all or any of these chattels?

Give reasons for your answers.

II What is an acceptance of a Bill suprâ protest? How and by whom may it be effected? Does the rule that there can be only one acceptance of a Bill apply?

III What is the object of noting and protesting negotiable instruments?

Do the rules as to payments suprâ protest apply to all negotiable instruments?

What is the origin and reason of the rule?

IV What is the object of crossing a cheque?

When, by whom, and in what ways may it be done?

V. "If the sum for which the customer drew his cheque be fraudulently altered and increased and the Banker pays the larger sum, he cannot charge his customer with the excess, but must bear the loss" Compare this rule with the provisions of the Indian Legislature on the point.

VI. In case of the capture by a belligerent of

(1) a neutral ship lawfully carrying goods of the enemy,

(2) a hostile ship carrying goods of a neutral.

What are the rights of the owners of the neutral ship and goods and of the captors?

VII. In what cases, if any, was a Seaman entitled by the Common Law of England to wages, if no freight was earned, and in what cases, if any, does the Common Law rule still debar a Seaman in such case from recovering wages?

VIII. A cargo having been insured under an ordinary policy was expressly warranted free from (*inter alia*) all consequences of hostilities.

As an act of hostility a Beacon was extinguished. The master ignorant of the fact was misled, deviated from his course and ran the ship on a rock. The cargo was lost. Are the underwriters liable? Give reasons for your answer.

IX. What is meant by a constructive total loss of a ship?

In order to recover, what course must the assured adopt?

If, after action brought, the ship is recovered, what are the rights of the assured?

X. A ship worth £10,000 was insured in a valued policy at £8,000, and was lost by collision at sea. The other ship having been condemned to pay £5,000 on account of the collision, the underwriters, having paid £8,000, claimed the £5,000. The owners objected on the ground that they were entitled to a portion of £5,000. Are the underwriters entitled to £5,000? Give reasons for your answer.

XI. Explain the meaning of the 'Memorandum' in an ordinary policy of Maritime insurance.

XII Give a short statement of the facts, decision and grounds of decision in three of the following cases.

Roux *v.* Salvador.
Lewis *v.* Rucker.
Forbes *v.* Aspinall.
Croft *v.* Day.
Tyrie *v.* Fletcher.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

CONSTITUTIONAL HISTORY.

I. Explain the following terms and phrases:—

Law-worthy. View of Frank-plegde. Compurgation. Heriot. Contenement. Escuage. Town let in the fee farm. Statute Merchant. Statute Staple.

II. On what grounds does Hallam ascribe to the 'Confirmation of Charters' an importance not less than that of the Magna Charta?

III. What essential principles of Constitutional law were established in the reign of Edward III?

IV. State the grounds upon which the King's bench declined to discharge Darnell and others (imprisoned for refusal to contribute to the general loan demanded by Charles I) with a short summary of the arguments for the Prisoners and the Crown.

V. Give a concise statement of the contents of the Petition of Right.

What was the King's principal objection to it, and how did he try to evade the passing of this law?

VI. What were the principal statutes enacted by the Long Parliament in 1641? What was their effect on the constitution?

VII. What feudal rights of the Crown were abolished at the Restoration? What led to the demand for their abolition?

VIII. "The condemnation of Sir Henry Vane was very questionable even according to the letter of the law It was plainly repugnant to its spirit." Explain this passage fully.

IX. When and how was the right of Parliamentary control over public expenditure established?

X. "No pardon under the great seal shall be pleadable to an impeachment by the Commons in Parliament."

When and how was this principle established?

XI. What was the point of Constitutional law raised in Fitzharris' case?

How does Hallam refute Blackstone's interpretation of the law on this point?

XII. What evils were remedied by the Habeas Corpus Acts?

FRIDAY, 22ND JANUARY, 2 TO 5 P.M.

PUBLIC INTERNATIONAL LAW.

I. What are the sources of Public International Law? In what sense is the word 'Law' used in speaking of this subject, and how does it differ from the ordinary acceptation of the term in relation to municipal law? State wherein consists the sanction or the enforcing power of this branch of International Law.

II. Explain the doctrine of "Intervention" with reference to the grounds on which it is founded, the rights it gives rise to, and the circumstances which justify the exercise of those rights; and mention any two instances evidencing the exercise of such rights.

III. In the case of collision of treaties, state the rules by which preference is given to the provisions of one over those of the other.

IV. (*a*) What are the personal rights of a Sovereign, as such, in his international relation with other States, and what are the rules that qualify such rights?

(*b*) What is the doctrine "Exterritoriality," and what are the classes of cases to which it applies?

V. Discuss briefly the soundness or otherwise of the propositions, stated as general principles of law, that *free bottom makes free goods*, and that *an enemy bottom makes enemy goods*, noticing what important national leagues and treaties were formed in connection with this subject. Two instances of each will suffice.

VI. (*a*) What acts in breach of neutrality will subject a neutral vessel to condemnation?

(*b*) The Commander of neutral vessel is overawed by a military force of a belligerent power and is compelled on pain of death to convey contraband to a neighbouring port. The enemy by a superior force seizes the vessel and claims her condemnation. What is your decision? Give reasons.

VII. (*a*) What points must be proved to establish a breach of blockade? and how long are the rights of a belligerent kept alive as against an offending vessel that escapes, and what are the penal consequences of such breach as against (1) the vessel and (2) her cargo.

(*b*) A neutral vessel sails from a neutral port with contraband goods of another country for a belligerent port. On approaching she finds the port blockaded, and a breach impossible. She retraces her course with a view to escape to the original port from which she started. Shortly after, a suspicion of contraband is roused and a privateer gives her chase and captures her with the contraband. Will you condemn both or either of them and which? Give reasons.

VIII. The State X is at war with the State Y.

A neutral owner of a vessel sends his own goods of a contraband character to a belligerent port of X. Soon after the commencement of her voyage, she is seized by force by another neutral power for the benefit of her own transport service. A privateer of Y, on suspicion of contraband bound to X, seizes by superior force the vessel with the contraband goods. How will you decide as to the fate of the vessels and the goods. Give reasons.

IX. A merchant of a neutral country having no seaport of her own, purchases a vessel from another neutral country and begins to trade on his own behalf. He buys goods at a colonial port and expecting a favorable market sends the same in his own vessel to a port in the mother country which was at war with the State X. A privateer of X seizes the vessel and the cargo. How will you decide? Give reasons.

X. X and Y are belligerent countries waging a protracted war. Z is a neutral country.

A is a subject of Z living and trading at Y

B is a subject of X living and trading at Y

C is a subject of Y living and trading at Z

D is a subject of X living and trading at X.

A, B, C and D are partners and joint owners of a house of trade established at Z. They send their joint goods in their own vessel for sale at Y. A privateer of X seizes the vessel and the goods. What will your decision be about the vessel and the goods, as a Court of prize? Give reasons for your decision.

XI. (*a*) What did the case of "The Maria" decide?

(*b*) What is the effect of conquest on the *lex loci* of a conquered tract about which there has been no special treaty on the termination of war? What is the leading Indian case upon the subject?

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M.

PRIVATE INTERNATIONAL LAW.

I. Explain the origin and growth of Private International Law as a system, and the legitimate scope of its operation in a given country, and state wherein consists its sanction or the enforcing power.

II. (*a*) Explain in what respects the domicil of origin asserts its superiority over other kinds of domicils.

(*b*) What did the case of "The Indian Chief" decide?

III. (*a*) A gentleman having his domicil in one country marries a lady having her domicil in another country. The marriage is celebrated in a third country according to the form obtaining in the wife's country but differing from that recognized at the place of marriage and in the country of the husband. Is the marriage valid? Give reasons.

(*b*) A, a native of W, possessing considerable movable property, celebrates his marriage at X with B, a native of Y. A and B do not live on happy terms. A, without the consent and contrary to the wish of B, changes his domicil to Z and removes himself to that place with all his movable effects, B refusing to follow him. A dies at Z, intestate, leaving behind him B and other heirs. The Law of Succession at Z is more prejudicial to B than that of all the other countries before mentioned. Determine the law of what country ought to govern the succession of B. State your reasons fully, and, if you can, the authority on which you rely.

IV. (*a*) How does the law of England differ from that of Scotland and France on the subject of legitimation?

(*b*) A is born of parents, natives of X, but not in lawful wedlock. Subsequently a marriage is solemnized between the parents at X, by whose law A becomes qualified, from the moment of the marriage, to inherit the property of his parents as though he were born in lawful wedlock. No such law obtains at Y, and according to its ceremonial law the marriage also is invalid. A's father dies at Y, leaving immovable property there. Will A, or his mother, or both, take the property, granting that according to the general law of succession prevailing at Y, a widow and son will succeed together? State your reasons, and cite your authority.

V. State the general law of Nations, as it originally stood, and the subsequent changes it has undergone, regarding the protection of foreign copyright, particularly noticing the English law upon the subject.

VI. Explain and illustrate the maxim "Locus Regit Actum." Are there any, and, if so, what limitations or exceptions to this rule?

VII. State, with your reasons, by the law of what place would the contract be governed in the following cases, no special provision being made for the place of performance. Answers to any four of the following, at the option of the candidate, will suffice.

(*a*) A, a merchant at X, and B, a merchant at Y, conclude a contract by means of letters of proposal and acceptance.

(*b*) An agent, without authority, purchases goods at X for his principal trading at Y, who ratifies the agent's act at Y.

(*c*) A, a merchant at X, appoints B for procuring orders for his merchandize, but not for selling. B procures an order from C, a merchant at Y, and forwards the same to A. A despatches the goods from X, which C receives at Y.

(*d*) A, a merchant of X, borrows at Y from B, a merchant of Y, mortgaging immovable property situate at X.

(*e*) A, a merchant at X, executes at X a power of attorney to B, his agent at Y, authorizing him to sell a ship lying at Y, in A's name to C, a merchant at Y. A dies. B, in ignorance of the death, executes the sale at Y which is invalid by the law of X, but valid by the law of Y.

(*f*) A, a commission merchant of X, makes an advance at X, to B, an agent of C trading at Y. C sends goods to A for sale. The sale proceeds fall short of the advance. A sues C for the balance.

VIII. Where a merchant becomes a bankrupt, having become indebted to many people in different countries, and possessing considerable movable property in all the countries, state, giving your reasons, where and according to the laws of which country the proceedings in bankruptcy are to be conducted and the assets administered, particularly noticing the principles which an English Court would apply in dealing with such cases.

IX. Where the law of prescription of the place of performance is in conflict with the law of the place of the forum state how an English Court would decide the question of preference between the two conflicting laws, and briefly notice what arguments are generally urged for and against the English principles.

X. A is a native of X. He makes his will at Y, and dies at Z, leaving his personal property there. State how an English Court would decide the validity of the will both with regard to its form and the dispositions contained in it; state also how far you consider the English law upon the subject to be sound or otherwise; giving reasons in support of your answer.

XI. A, a native of X, executes a will at X whereby a power of appointment is reserved in favour of B, a native of Y, to dispose by will of certain movable property located at Z. B makes his will at Y in execution of the power. The laws of X, Y and Z are all in conflict with one another. State by what country's law the validity of the dispositions, and the interpretation of B's will, ought to be governed. Give reasons.

SATURDAY, 23RD JANUARY, 2 TO 5 P.M.

ROMAN LAW.

I. Distinguish between the English and Roman Law of Sale.

II. What safeguards were provided against the abuse of the authority of a Tutor?

III. Explain the principles of the Lex Aquilia, which establish the action "damni injuriæ."

IV. How were servitudes created and extinguished in Roman Law?

V. Write a short account of the Law of Marriage among the Romans.

VI. What was meant by a possession (1) "ex justa causa" (2) "bonâ fide."?

VII. Give instances of obligations quasi ex contractu. What was the *Lex Rhodia de jactu*.

VIII. Describe the following:—"Novatio." "'Compensatio' and 'Acceptilatio.'"

IX. State the Roman Law on the subject of Earnest

X. Note the distinction between actions "stricti juris" and "bonæ fidei." What was the "Interdict unde vi" and the "Actio præjudicialis."

XI. Who were incapable of making a will? What is Legitim?

FIRST L M. S. DEGREE EXAMINATION, 1885.

MONDAY, 6TH JULY, 10 A.M. TO 1 P M.

CHEMISTRY.

I Explain what is meant when the following terms are applied to salts.—'Normal,' 'Acid,' 'Double,' 'Neutral,' and 'Basic' Give examples of each kind of salt.

II. Give the preparation and properties of Marsh-gas. How may the composition of this gas be determined by experiment?

III. Describe the preparation of the different modifications of Phosphorus.

IV. Complete the equations—

(*a*) $MnO_2 + 4\,HCl =$

(*b*) $6\,KHO + Cl_6 =$

(*c*) $P_4 + 3\,KHO + 3\,H_2O =$

(*d*) $3\,KClO_3 + 2\,H_2SO_4 =$

(*e*) $As_2O_3 + 2\,HNO_3 + 2\,H_2O =$

V. Enumerate the most important ores of iron. Distinguish between 'wrought' iron, 'cast' iron, and 'steel'

VI. Describe and explain the preparation of Calomel by precipitation and sublimation. Give its behaviour towards solutions of Potash and Ammonia respectively; and state the reaction that takes place when it is heated with dry Carbonate of Soda. Explain all reactions by equations

MONDAY, 6TH JULY, 2 TO 5 P M.

MATERIA MEDICA.

I. What pharmaceutical preparations contain Opium or Morphia, and what is the strength and 'adult' dose of each?

II. What are the preparations of Belladonna and its alkaloid, and what are their therapeutical uses?

III. Make out a list of hæmostatic medicines, and explain how they act?

IV. How is Camphor obtained? What are its preparations and their uses?

TUESDAY, 7TH JULY, 10 A.M. TO 1 P.M.

PHYSIOLOGY.

I. Describe the Lymphatic System, and state briefly the functions of this system.

II. What changes take place during Gastric digestion?

III. Give a detailed account of the various functions of the tongue.

IV. What are the uses of the blood in the human economy; what is its chemical composition? Describe the different corpuscles found in it.

V. What is meant by the Rhythm of respiration; what changes does the air undergo when respired; what changes take place in the blood in the lungs?

VI. What is the composition of the Urine; what is the average quantity passed by an adult in the day; what circumstances cause it to vary? Describe how the secretion takes place?

TUESDAY, 7TH JULY, 2 TO 5 P.M.

ANATOMY.

I. Describe the Nasal fossæ, and mention the cavities with which each fossa communicates, and how?

II Mention the superficial veins of the upper extremity, and give their relations at the bend of the elbow.

III. Describe the course, relations, and branches of the Dorsalis Pedis artery.

IV. Describe the Lumbar plexus of nerves and its branches, so far as they lie within the abdomen.

V. Describe the course and distribution of the lymphatics of the Testis.

VI. Give the origin, insertion, and nervous supply of the following muscles:—

(1) Occipito-frontalis;

(2) Pronator quadratus;

(3) Transversalis abdominis;

(4) Sartorius;

(5) Gracilis.

SECOND L. M. S. EXAMINATION, 1885.

MONDAY, 13TH JULY, 10 A.M. TO 1 P.M.

MEDICINE.

I. What are the symptoms and treatment of chronic lead poisoning?

II. Describe a case of measles, and indicate its treatment.

III. Enumerate the causes of hypertrophy of the heart, and explain their action.

IV. Describe a case of malarial remittent fever, and explain how it may be diagnosed from enteric fever.

MONDAY, 13TH JULY, 2 TO 5 P.M.

SURGERY AND OPHTHALMOLOGY.

I. Mention the symptoms of simple fracture of the centre of the clavicle, and give your treatment of the injury.

II. Describe the various dislocations of the shoulder-joint and appropriate treatment.

III. Give the various forms of Epistaxis, and explain their treatment.

IV. What are the varieties, causes, and symptoms of Tetanus? Give your treatment.

V. Describe briefly the various forms of Hydrocele, diagnosis and treatment.

VI. What is Trichiasis? Describe the causes, varieties, and treatment.

TUESDAY, 14TH JULY, 10 A.M. TO 1 P.M.

MIDWIFERY, ETC.

I. What is Natural Labour? Describe how you would manage a case throughout.

II. What are the causes of Tedious Labour, and how would you treat a case?

III. Give the causes, symptoms, and treatment of Abortion.

IV. Describe a case of Subinvolution of the uterus, stating what treatment you would adopt.

V. Describe a case of Mammary abscess, and give the treatment you would pursue.

VI. Describe a case of Thrush in a child. How would you treat it?

TUESDAY, 14TH JULY, 2 TO 4 P.M.

MEDICAL JURISPRUDENCE.

I. Give the symptoms of Chronic Lead-poisoning, and under what circumstances is it liable to occur in this country?

II. What circumstances would enable you to form an opinion as to the homicidal, suicidal and accidental nature of a gun-shot wound?

III. Describe the post-mortem appearances in a case of death from strangulation; and what evidences would lead you to believe that strangulation was homicidal?

IV. When called to see the body of a new-born child, what points would you note down before commencing your examination, and what evidences would lead you to infer that the child had breathed before it died?

WEDNESDAY, 15TH JULY, 10 A.M. TO 12 NOON.

HYGIENE.

I. What are the chief dangers to be apprehended from the use of impure water? For what impurities would you examine a sample of drinking water? How would you purify water?

II. Refer the following foods to their respective classes:—Mutton, Bread, Ghee, Sugar, Fish, Rice, Cabbage, Dhal. What articles of diet may be allowed to a diabetic patient? Why is milk a perfect food?

III. How would you protect yourself and others when marching through a malarious country? Mention the chief points of interest connected with the malarial poison.

PRELIMINARY SCIENTIFIC EXAMINATION, 1885.

MONDAY, 6TH JULY, 10 A.M. TO 1 P.M.

CHEMISTRY.

I. What chemical changes take place when crystals of Potassium iodide are heated with—

(*a*) Strong Sulphuric acid;

(*b*) Syrupy Phosphoric acid;

II. Give the characters of Ferrous and Ferric salts respectively. How may Ferrous sulphate be converted into Ferric sulphate? Give equations.

III. Describe the preparation and properties of Nitrous oxide.

IV. How has Urea been prepared artificially? Describe fully the method of extracting it from human urine.

V. What gas is evolved when Sulphide of Antimony is subjected to the action of hot and strong Hydrochloric acid? Explain the behaviour of this gas towards—

(*a*) Corrosive sublimate;

(*b*) Ferric chloride (acid solution);

(*c*) Sulphate of zinc (acid solution);

(*d*) Chlorine;

(*e*) Sulphur dioxide.

Explain reactions by equations.

VI. How would you prove that a molecule of water contains two atoms of hydrogen? Give the reactions in symbols.

VII. How may Anhydrous Prussic acid be obtained? Give two tests for its detection.

TUESDAY, 7TH JULY, 10 A.M. TO 1 P.M.

BOTANY.

I. Describe, in technical language, the plants marked *A* and *B*.

II. Describe the *ripe fruit* of any umbelliferous plant with which you may be acquainted, and contrast it with the fruit of the Coffee plant.

III. Place the following genera under their respective Natural Orders, and mention what useful products they supply—

(*a*) Pterocarpus;	(*d*) Alstonia;
(*b*) Conium;	(*e*) Strychnos;
(*c*) Carthamus;	(*f*) Hyoscyamus.

IV. If a piece of wood is burnt, the greater part of it passes off as gas and a very small portion only is left behind as ash: what are the gases which are given off? In what condition did they exist in the wood? And from what sources did the living tree derive them.

V. Name examples of Indian plants having *monœcious*, *diœcious*, and *polygamous* flowers.

VI. Compare the structure of the ovary of the *cocoa-nut* at the time of its fertilisation with the ripe fruit, and explain how the so-called *milk* is developed.

FIRST M. B. AND C. M. DEGREE EXAMINATION, 1885.

MONDAY, 6TH JULY, 10 A.M. TO 1 P.M.

COMPARATIVE ANATOMY.

I. Give an account of the organisation and life-history of a Sponge.

II. Compare the digestive system of the cow with that of the human subject.

III. What are the essential characters that distinguish the skulls of Osseous Fish, Amphibians, Reptiles, Birds, and Mammals from one another?

IV. To what class of animals does the medicinal leech belong? Describe the structure of its mouth and digestive system.

V. Describe the structure, development and mode of reproduction of a Guinea-worm.

VI. Describe the principal modifications of the vertebral column in the class Vertebrata.

MONDAY, 6TH JULY, 2 TO 5 P.M.

MATERIA MEDICA.

I. How is Iodine obtained? What are its preparations and their composition?

II. Give a list of emetic medicines and their doses.

III. What are the preparations of Ipecacuanha, their therapeutical actions, and the dose of each?

IV. How is Turpentine obtained, and what are its uses in medicine and surgery?

TUESDAY, 7TH JULY, 10 A.M. TO 1 P.M.

PHYSIOLOGY.

I. Describe the structure of the Kidneys, and give an account of their function.

II. Explain the means by which the pulmonary Alveoli are ventilated. What is the function of the Pleuræ?

III. Describe the structure of the human Ovary. State the changes which occur in, and the appearances presented by, the Ovary, before and after menstruation.

IV. How are the mechanisms of mastication and of deglutition carried on? Describe the changes the food undergoes in the mouth, stomach, small and large intestines.

V. What is meant by the blood circulating? Trace it? How many times in a minute does the heart of a healthy male adult, when in a state of rest, contract?

VI. What is meant by a "Nerve Centre?" How do they differ from nerve plexuses? Name the different Nerve Centres, and state the functions common to all, and those peculiar to some.

TUESDAY, 7TH JULY, 2 TO 5 P.M.

ANATOMY.

I. Describe the Palate bone.

II. Describe the Sinuses of the Dura Mater.

III. Describe the boundaries of the Popliteal Space and its contents in the order in which they appear on dissection.

IV. Describe the course, relations and branches of the abdominal aorta.

V. Describe the posterior annular ligament of the wrist, and name the tendons passing through it.

VI. Describe the right lymphatic duct.

SECOND M. B. AND C. M. DEGREE EXAMINATION, 1885.

MONDAY, 13TH JULY, 10 A.M TO 1 P.M.

MEDICINE AND PATHOLOGY.

I. Give the pathology, symptoms, and treatment of a case of uncomplicated asthma.

II. Give a brief account of the life histories, in their relation to man, of the tænia solium and cysticercus cellulosæ.

III. Give the pathology and symptoms of enteric fever, and show how it can be diagnosed from malarial remittent fever.

IV. What is the test for albumen in the urine, and what is albumenurea a sign of?

MONDAY, 13TH JULY, 2 TO 5 P.M.

SURGERY.

I. Give the symptoms of Aneurism of the Subclavian Artery. What portion of the vessel is usually ligatured? Describe the operation.

II. Mention the various dislocations of the hip-joint, symptoms and treatment.

III. Give the symptoms and treatment of a case of fracture of the base of the skull. What is the usual result?

IV. Describe a case of Fissure of the anus, symptoms and treatment.

V. Describe Epitholioma. Where does it usually occur, and how does it differ from other forms of Cancer?

VI. Give an account of Teale's operation for amputation of the leg.

TUESDAY, 14TH JULY, 10 A.M. TO 1 P.M.

MIDWIFERY, &c.

I. What are the varieties of Breech Presentation, and how should a Breech case be managed throughout?

II. Mention all the cases in which the Forceps should be used, and describe how you would apply the long Forceps?

III. Give the causes, symptoms, and treatment of Post-partum Hæmorrhage?

IV. Describe a case of retroversion of the Uterus, and how would you distinguish it from a case of retroflexion?

V. What is Phlegmasia dolens? Describe its course, terminations, and treatment.

VI. What are the principal causes of convulsions in children? Give their diagnosis. What treatment would you adopt?

TUESDAY, 14TH JULY, 2 TO 5 P.M.

MEDICAL JURISPRUDENCE.

I. By what tests and characters would you distinguish Brucia, Morphia, Narcotine, and Strychnia from one another?

II. The stomach of a person, who has just died under suspicious circumstances, is sent to you for examination; how would you proceed to find out if death had been caused by the administration of poison?

III. Give the phenomena of death by drowning. Give your idea of their respective values as signs of death from that cause, and mention the best means of restoring animation, and how long you would persevere in using them?

IV. Supposing an unmarried woman with abdominal enlargement to be wrongfully accused of being pregnant: mention the several conditions to which such enlargement may be due and the means by which you would distinguish them.

V. Give the symptoms and describe the course of chronic poisoning by Tartarated Antimony. How would you discover Antimony in the tissues of the body?

WEDNESDAY, 15TH JULY, 10 A.M. TO 1 P.M.

HYGIENE.

I. What diseases arise from the use of bad meat, bad bread, and bad water? How can they be avoided?

II. Describe a dry-earth system of conservancy suitable for a large town in India. Mention the chief deodorising and desinfecting substances recommended.

III. State the average composition of atmospheric air. What are the common impurities detected in—

(i) open air,

(ii) closed space—

α inhabited by the healthy;

β .. .. sick?

Mention at least six abnormal conditions caused by respiring bad air. How would you examine the air of a Hospital ward?

WEDNESDAY, 15TH JULY, 2 TO 5 P M.

OPHTHALMIC SURGERY.

I. What is Glaucoma? Mention its varieties and treatment?

II. Describe the operation for extirpation of the eye ball.

III. Give a description of the varieties of Iritis, symptoms and treatment.

IV. Describe the normal appearance of parts seen by the Ophthalmoscope.

B. C. E. DEGREE EXAMINATION, 1886.

MONDAY, 18TH JANUARY, 10 A.M. TO 1 P.M.

SURVEYING.

I. Draw the following scales; give the representative fraction of (*a*) and the ordinary designation of (*b*) and (*c*): —

(*a*) 6″ to 1 mile.

(*b*) $\frac{1}{12000}$.

(*c*) $\frac{1}{3960}$.

II. Draw comparative scales $\frac{3}{800}$ to represent English feet, French metres, Greek cubits, 1 cubit = 0·45 metre.

III. Explain the principle on which Verniers are constructed, and state whether it is preferable to take $(n - 1)$ or $(n + 1)$ parts of the primary scale for (n) parts of the Vernier.

IV. Prepare a traverse table from the following data, and plot the survey to a scale of 200 feet = 1 inch:—

Line.	Distance.	Angle.	——	——
AB ...	238	*GAB*	225° 0′	
BC ...	370	*ABC*	112° 30′	
CD ...	362	*BCD*	100° 0′	Bearing of
DE ...	595	*CDE*	123° 15′	*AB*
EF ...	268	*DEF*	112° 50′	114° 10′
FG ...	346	*EFG*	143° 15′	
GA ...	351·5	*FGA*	83° 10′	

V. Give the caculations necessary for setting out a curve from the following data:—Radius 1,500 feet, angle of intersection of tangents 93°. The curve is to be set out by chords and offsets therefrom, the first chord which starts from the end of the curve measures 750 feet, the second chord measures 600 feet. Find the length of the other chord, and calculate the offsets from chord to curve at a distance of 75 feet from the centre of the first chord, at

200 feet from the centre of the second chord, and at 300 feet from the centre of the third chord.

VI. *ACB* is a triangle with the sides *AB* and *AC* produced, the angle *BAC* is 5° and *ACB* is 55°, the length of *BC* is 2,500 feet. Two reverse curves of equal radii (600 feet) have for their tangents respectively *AC* and *CB* and *CB* and *AB* produced. Find the length of straight line intervening between the adjacent ends of the two curves.

VII. What is meant by the variation of the compass? Is it the same at all places? Does the variation increase or decrease annually? Give two instrumental methods of determining the variation at Madras.

VIII. Note the main points of difference between an ordinary, and Everest and a transit theodolite, and give sketches of each.

MONDAY, 18TH JANUARY, 2 TO 5 P.M.

SURVEYING AND LEVELLING.

I. Draw to a scale of 200 feet to 1 inch, the survey of which the field book is given in Diagram *A*. The line *AB* runs in a westerly direction, and the point *D* is to the north, and the points *G* and *H* to the south of that line.

II. On the section of a road Diagram *B*—

(1) Fill in the heights of embankment and depth of cutting at each point on the section;

(2) Plot, using a scale of 200 feet to 1 inch for the lengths and a scale of 20 feet to 1 inch for the breadths, a plan showing the position of top of slopes of cuttings and of bottom of slopes of embankments. The road is to be 20 feet wide. The ground is level across the section, except between 0 and 750 where it slopes 1 in 20 from west to east. Slopes of cuttings 1½ to 1 and slopes of embankment 2 to 1.

(3) Supposing pegs have to be put in to show the level of the surface of the road at each 100 feet and also at the points where the gradients change; make up a level book showing the readings at each peg. Assume the reading on peg 0 (33 00) to be 3 50, and

that you move your level after putting in the pegs at 500, 1100 and 1600, and that the back readings on these pegs are respectively 4·82. 6·10, and 12 54.

The remainder of the afternoon will be devoted to a practical examination in the use of surveying and levelling instruments.

TUESDAY, 19TH JANUARY, 10 A.M. TO 1 P.M.

CONSTRUCTIVE ENGINEERING.

I. A wall has a rectangular section *ABCD* with a vertical back *AB*. Produce the base *BC* to *E*, and join *EA*. What must be the ratio between *BC* and *BE*, in order that the triangular section *ABE* may have the same moment of stability round *E* that *ABCD* has round *C*?

II. Draw, according to "Molesworth's formula," the cross section of a reservoir dam for holding water 140 feet deep.

$$Y = 7\,5\,\sqrt{\frac{w^3}{P}}, \quad P = 16{,}000 \text{ lb.}$$

III. A roof truss is made up of two rafters *ABC*, *ADE*; a kingrod *AF*; two tie-rods *CF*, *EF*; and two struts *FB*, *FD*, in the line of the tie-rods produced; $AC = AE = 20$ feet, $CE = 32$ feet, $AF = 8$ feet. Trusses placed 8 feet apart: vertical load 50 lb. per square foot of roofing in addition to a load of 1000 lb. at *D*. Find the stress on each part.

IV. Find the stresses that would be caused in the same roof by a wind pressure normal to the roof on one side, when the force of the wind blowing horizontally against a surface perpendicular to its direction is 38·18 lb. on the square foot.

V. A rolled iron beam having a span of 16 feet, bears a uniform load of 150 lb. per foot in addition to weights of 600 lb. and 800 lb. hung at points 4 feet and 6 feet, respectively, from one end of the span. What is the maximum bending moment?

VI. If the beam loaded as described in the last question were 6 inches deep, with flanges $3'' \times \frac{1}{2}''$, and web $\frac{1}{4}''$ thick, what would be the maximum stress in the flanges?

VII. A girder, 140 feet long, is continuous over two openings; spans for calculation 68 feet; left span loaded with 15·56 cwt. per foot; right span unloaded. Find the bending moment at the central pier, and the maximum bending moment in the left span. How is the bending moment of the right span shown graphically?

TUESDAY, 19TH JANUARY, 2 TO 5 P.M.

CONSTRUCTIVE ENGINEERING.

I. Describe the *setting* and *firing* of bricks in an ordinary English pattern kiln.

II. Give a short account of the manufacture of Portland cement.

III. Make a sketch of a curb for a foundation well 6 feet in diameter, and describe the sinking of well-foundations.

IV. Draw a cross section of a roof composed of wrought iron girders with brick arches between for a room 40 feet long and 25 feet wide.

V. Specify suitable tests for the tensile strength of the wrought iron plates and rivet-bars of a plate-girder. What is the ordinary test for the transverse strength of cast iron?

VI. If a canal has a bottom width of 60 feet, slopes 1 to 1, depth 4 feet, fall 1·48 feet per mile, what should be the section and fall of a branch channel to carry $\frac{1}{3}$th part of the water with the same velocity?

VII. Give a short account of the vertical falls used on the Baree Doab Canal.

VIII. Describe any two of the modules that have been proposed for equalising the discharge from an irrigation channel under various heads.

IX. Make a sketch of the ordinary joint between the rafter and tie-beam in which the rafter is truncated and the shoulder of the tenon returned in front.

Sketch also the corresponding joint in which the place of the mortise is taken by a groove in the rafter and the place of the tenon by a tongue in the tie-beam.

WEDNESDAY, 20TH JANUARY, 10 A.M. TO 1 P.M.

HYDRAULICS.

I. Find the head of water which will ensure a discharge of 8 cubic feet per second through an orifice, 6 inches square, in a thin plate.

II. Find the discharge per second through a pipe whose length is 4 feet and diameter 12 inches, the head or depth from the surface of water to centre of pipe being 12 feet.

III. Find the discharge per foot of weir when the velocity of approach is 6 feet per second and when the height or depth of water over weir, measured a little distance back from it, is 2 feet.

IV. Find the discharge over a submerged weir 10 feet long when the water approaches the weir with a velocity of 6 feet per second and with a depth of 2 feet over weir, the water below weir being 1 foot above weir crest.

V. A water channel is 7 feet wide at bottom; the length of each sloping side is 6·8 feet; the width at surface of water is 18 feet; the depth 4 feet; and the inclination of the surface 4 inches per mile: what is the discharge per minute?

VI. If a river, 1,000 yards broad, with a mean depth of 10 feet, has a mean velocity of 9,000 yards per hour; at what height over an anicut, whose height equals the depth of the river, would the whole be discharged.

VII. Deduce a formula by which the dimensions of a maximum discharging trapezoidal channel may be determined where (h) = depth in feet, (d) = discharge in cubic feet per second, (n) = the ratio of the side slopes (base to perpendicular), and (f) = the fall in feet per mile.

VIII. Find the time required to empty a lock which measures 120 feet by 35 feet; the depth of water in the lock being 12 feet and in the lower reach 4 feet. The lock empties through two sluices, each 2 feet high and 2 feet broad, whose cills are on a level with the bottom of the lock.

IX. Find the diameter of a pipe, 12,100 feet long with 9 feet head over its lower end, required to deliver 10 gallons per head in six hours to a population of 400,000.

X. Find the diameter of each of two pipes of equal diameter which together would deliver the same quantity under similar conditions.

WEDNESDAY, 20TH JANUARY, 2 TO 5 P.M.

ESTIMATING.

I. What are the contents in cubic yards of a cutting whose depth at each chain is as follows:—

Distance in chains ..	0	1	2	3	4	5	6
Depth in feet ..	0	4	7	9	8	5	0

The width of cutting at formation level is 20 feet, and the sides slope $1\frac{1}{2}$ to 1. The ground is level across.

II. Estimate the amount and cost of the work to be done in the erection of the bungalow shown in the accompanying plan.

THURSDAY, 21ST JANUARY, 10 A.M. TO 1 P.M.

EUCLID AND ALGEBRA.

I. The interior angles of any rectilineal figure together with four right angles are equal to twice as many right angles as the figure has sides.

Prove that a plane surface can be covered exactly by *equilateral triangles* and *regular dodecagons* described upon equal bases.

II. Inscribe a circle in a given triangle.

Two straight lines are given which, if produced, will meet outside the limits of the paper. Shew how to draw the bisector of the angle between them.

III. O is the centre of a given circle. Find a twelfth part of the circumference, using only the *ruler* and *compasses*.

IV. Define *proportion* and *duplicate ratio*.

Similar triangles are to one another in the duplicate ratio of their homologous sides.

Draw two straight lines parallel to a side of a given triangle so as to divide it in the ratio of 1 : 3 : 5.

V. If from the vertex of a triangle a perpendicular be drawn to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

If I is the centre of the circle inscribed in a triangle ABC, and P, Q, R, the centres of the escribed circles, prove that AP : AI : : PQ. PR : IQ. IR.

VI. Two angles in space have the arms of one respectively parallel to the arms of the other. Prove that the angles are equal or supplemental What is the inclination of the planes in which these angles are drawn?

VII. Solve the following equations:—

(*a*) $5x + 2y = 28$; $3x^2 - 4xy - 4y^2 = 0$.

(*b*) $\frac{y^2z}{2\sqrt{3}} = \frac{z^2x}{3} = \frac{x^2y}{\sqrt{2}} = 1$.

VIII. (*a*) Insert three arithmetic and three geometric means between 2 and 512.

(*b*) In all geometric series whose common ratio is 5, the arithmetic mean between the second and fourth terms is thirteen times the second term.

IX. (*a*) Show that the co-efficient of x^n in the expansion of $(1 + x)^{-\frac{1}{2}}$ is equal to $\frac{\lfloor 2n + 1}{\lfloor n \; \lfloor n} (-4)^{-n}$

(*b*) Apply the Binomial Theorem to find the cube root of the series $1 + 2x + 3x^2 + 4x^3 + \ldots\ldots$

X. (*a*) Wherein lies the convenience of the logarithmic tables being calculated to the base 10?

(*b*) Find x from the equation $\log x + \cdot 423786 = 0$ given that

$\log 3 = \cdot 4771213$

$\log 11036 = 4 \cdot 0533090$

$\log 11037 = 4 \cdot 0533474$.

THURSDAY, 21ST JANUARY, 2 TO 5 P.M.

TRIGONOMETRY AND MENSURATION.

$\pi = 3{\cdot}14159.$

I. Express the unit of circular measure in seconds.

If the earth's radius, 3,950 miles, subtends at the sun's centre an angle of 8·95 seconds, express this angle in circular measure, and determine the distance of the sun from the earth.

II. Prove the following identities:—

(*a*) $2 \tan(\tan^{-1} a + \tan^{-1} a^3) = \tan(2 \tan^{-1} a)$.

(*b*) $\text{Sin } 1^\circ + \sin 5^\circ + \sin 9^\circ + \ldots + \sin 29^\circ = 8 \sin 15^\circ \cos 8^\circ \cos 4^\circ \cos 2^\circ$.

III. Two wheels A and B whose diameters are 4 feet, and 1 foot 4 inches respectively, and centres 6 feet apart, are connected by an endless belt which passes over A, under B, then over B and under A, so that it crosses itself between the wheels. Find the length of the belt.

IV. The earth is represented by a sphere whose polar diameter NS measures 5 inches. A plane ANB touches the sphere at N. Any point P on the earth's surface is projected on to the plane by joining SP and producing it to meet the plane; and a map of the world known as a *stereographic projection* can thus be obtained. On such a map, find to one-thousandth of an inch the rectilineal distance between Madras and Melbourne, having given:—

Madras	Lat. 13° 4′ N	Long. 80° 14′ E.
Melbourne	Lat. 37° 50′ S.	Long. 145° 0′ E.

V. The driving wheel of a locomotive is connected with the piston rod by a crank a inches long, and connecting rod b inches long. Establish a relation between the distance traversed by the piston rod from the commencement of a stroke, and the angle θ swept out by the crank.

If $a = 9''$, $b = 54''$, find θ when the piston is at half stroke.

VI. The section of a screw thread is a rectangle $0''{\cdot}25 \times 0''{\cdot}24$ the shorter dimension being in the direction of the axis of the screw. The length of the axis is 5′ 8″, and the external diameter of the screw from outside of thread is $2\frac{1}{4}''$. The pitch is $0''{\cdot}5$. Estimate

the whole volume of metal in the screw including the spindle on which the thread is turned.

VII. Derive Simpson's rule for areas (1) when the curved boundary is convex (2) when it is concave to the axis of x.

Thence show how the rule can be applied to find *accurately* the volume of a conic frustum when the height and areas of the ends are given.

VIII. A road 24 feet wide, cutting slopes 1 to 1, bank slopes 2 to 1, is to be run at the level 20 feet about datum through ground of the following section—

Horizontal distances in feet	0	120	300	350
Heights above datum	22·5	25·7	14·3	18·0

Find the volumes of cutting and bank in cubic yards.

FRIDAY, 22ND JANUARY, 10 A.M. TO 1 P.M.

ARCHITECTURAL DRAWING.

Draw either—

I. A bridge to carry a road 16 feet between parapets across a stream 20 feet wide. Surface of water 12 feet below roadway; water 8 feet deep; banks 1 to 1, to be pitched near abutments; foundations on wells going down 12 feet below bed of stream; road 2 feet above general level of ground.

OR

II. A school-house for a large up-country town. Length 50 feet, width 30 feet, with verandahs and entrance porch. Good stone for rubble, bricks, tiles, and timber, available. Foundation on hard gravel 5 feet below surface of ground.

FRIDAY, 22ND JANUARY, 2 TO 5 P.M.

TOPOGRAPHICAL DRAWING.

Copy the plan placed before you to a scale of 4 chains to an inch. The quarter marked *A* should first be completed and coloured, and then the rest gone on with as time admits.

SATURDAY, 23RD JANUARY, 10 A.M. TO 1 P.M.

STATICS AND DYNAMICS.

$g = 32.$ $\pi = 3\frac{1}{7}.$

I. Determine the magnitude and position of the resultant of any system of forces acting along parallel lines in a plane.

A horizontal beam supported at each end is loaded with a continuous uniform load. (1) Find an expression for the moment of the resultant of the external forces acting on either side of any section of the beam about that section, and deduce the maximum value of the moment. (2) Sketch in a curve whose ordinates measure this moment throughout the beam.

II. Shew that the centre of gravity of a circular area is at the centre of the circle.

An angle iron is $7'' \times 5'' \times \frac{1}{8}''$. Find the distance of its centre of gravity from the outside of the bend.

III. Determine the conditions of equilibrium of n forces acting in a plane.

The thrust of an arch ring is delivered on to the vertical face of a rectangular abutment 20 feet high and 10 feet thick, built of masonry weighing 150 lbs. per cub. foot, at a point 7 feet below its top. The amount of the thrust is 10 tons per foot run of the wall, and its inclination to the vertical is 45°. Supposing the wall to have horizontal bed-joints, draw the line of resistance in its lower half. Scale 4 feet to 1 inch.

IV. A load of 1200 lbs. is lifted by means a 4-inch hemp rope coiled round a drum 5 feet in diameter, the power being applied vertically downwards to the running end of the rope. The drum, which weighs 650 lbs. has a wrought iron axle 4 inches in diameter carried in brass bearings well lubricated. Find the excess of P. over W when the drum is on the point of motion. The limiting angle of resistance for wrought iron on brass lubricated is 4° 20′.

When the drum is in motion, find the power required to overcome the rigidity of the rope. $A = 66{\cdot}0$, $B = 0{\cdot}558$.

V. The following observations were made on the horizontal flight of a projectile :—

	Initial vely.	Terminal vely.	Approxte. mean vely
	ft. per sec.	ft. per sec.	ft. per sec.
1st second .	1500	1430	1465
2nd second .	1430	1368	1399

Assuming the resistance of the air proportional to some power of the velocity, so that the retardation $f = kv^x$, deduce values of x and k.

VI. Find an expression for the kinetic energy of a body of weight W moving with a velocity V.

The length of the bore of the 18 ton gun is 12′ 3″ and its diameter 9″. An elongated projectile weighing 250 lbs leaves the muzzle with a velocity of 1500 feet per second. When the velocity has fallen to 1120 feet per second, the projectile strikes a target and penetrates 4 inches. Determine (1) the mean pressure per square inch on the base of the projectile while in the bore of the gun (2) the equivalent statical pressure of the blow delivered on the target.

VII. An irregular plane figure has an axis ADB exterior to it but touching it at D. A straight line DC at right angles to ADB traverses the figure, and is divided into a number of parts each equal to h. Through the points of division are drawn ordinates $a_1\ a_2\ a_3$ .. parallel to the axis and terminated by the boundaries of the figure. Show that the moment of inertia of the figure about the axis is approximately

$$\frac{h^3}{12}\left\{a_1^2 + a_2 + a_3 + \quad\right\} + \frac{h^3}{4}\left\{a_1 + (3)^2\, a_2 + (5)^2\, a_3 + \quad\right\}$$

VIII. A body is thrown in vacuo with a given velocity in a given direction inclined to the horizon. Determine its position at the end of any given time.

The depth of water on an anicut is 5 feet, the mean velocity of approach is 10 feet per second, and the water falls over a vertical face 6 feet high on to a horizontal apron. What is the greatest distance from the anicut at which water can strike the apron ?

SATURDAY, 23RD JANUARY, 2 TO 5 P.M.

HYDROSTATICS AND PNEUMATICS.

I. A rectangular sluice shutter 8 feet deep, whose plane is vertical, is opened and closed by rotating horizontally about a vertical axis which divides the breadth of the shutter into two equal parts The axis consists of an iron bar of uniform section, supported at its lower end on the sill of the sluice, and at its upper end by the superstructure. The depth of the shutter occupies the lower-half of the length of the axis, and the maximum depth of water on the sill is 8 feet. At what point of its length is the axis most likely to fail?

II. Define *specific gravity*.

(*a*) a 1 lb. metal scale weights weighs 13·78 oz. in water and 13·91 oz. in linseed oil. Determine the specific gravity of the oil:

(*b*) a piece of wood weighing 1 lb. is attached to a 2 lb. metal scale weight, and both together weigh $18\frac{5}{8}$ oz. in water. The scale weight alone weighs $27\frac{5}{8}$ oz. in water. Find the specific gravity of the scale weight, and the weight of a cubic foot of the wood.

III. The parallel sides of a rectangle are at depths x and $x + h$ below the surface of a fluid. Find the distance of the Centre of Pressure from the lower of the two sides.

A vertical rectangular sluice shutter, 4 feet deep, can be rotated in the direction of the hands of a watch, about a horizontal axis, by water pressure on its left face. Rotation in the opposite direction is prevented by a stop on the sill. Water rising above the top of the sluice passes into a horizontal shoot whose bottom is on a level with the top of the shutter, so that when the shutter opens, water passes out under the shoot. Determine the position of the axis, so that the shutter may be on the point of opening when the head on the sill is $5\frac{1}{2}$ feet.

IV. State (*a*) the conditions of equilibrium of a floating body and (*b*) the additional condition that the equilibrium may be stable.

A log of timber square in section floats symmetrically in water with one angle immersed. Assuming that the height of the metacentre above the centre of gravity of the displaced fluid $= I \div V$,

where I is the moment of inertia of the horizontal section of the timber made by the plane of the water about an axis passing through the centre of gravity of this section, and parallel to the axis of the log, and V is the volume of the fluid displaced, shew that for stable equilibrium the specific gravity of the timber must lie between $\frac{9}{32}$ and $\frac{1}{4}$.

V. Assuming the fact that the free surface of a liquid acted on by any force swhatever is perpendicular to the direction of the resultant of those forces, shew that if a cylindrical vessel with its axis vertical rotates about that axis, the surface of the water contained in it assumes the form which would be described by a parabola whose axis coincides with that of the vessel.

If the vessel is 2 feet in diameter, and rotates 60 times per minute, what will be the depression of the curved surface at its lowest point below the portion in contact with the sides of the vessel?

VI. The closed leg of a Boyle's tube measures 12 inches from the zero point. Mercury is poured into the open end of the tube until the levels above zero are 5″·00 and 26″·65 in the shorter and longer legs respectively. The barometer stands at 30″·31. Find, in inches of mercury, the absolute pressure of the air in the shorter leg, and shew that the experiment confirms Boyle's Law.

Assuming the Law of Charles regarding the proportionate change of the volume and temperature of a gas under constant pressure, shew graphically or otherwise that $V_1 = V \frac{460 + t_1}{460 + t}$ where V and V_1 are the volumes at temperatures $t°$ $t_1°$ F. Co-efficients of expansion between the freezing and boiling points of water = ·366.

VII. The receiver of a double acting air pump has ten times the capacity of the pump barrel. If the barometer stands at 30 inches, find how many strokes will be necessary to produce a vacuum of (*a*) 1 inch of mercury (*b*) $\frac{1}{4}$ inch of mercury.

VIII. Give reasons for your replies to the following:—

(*a*) water is said to boil at 212° F. Can water remain liquid at a higher temperature than this?

(*b*) A lump of ice is placed in a glass of water. Why does moisture appear outside the glass?

(*c*) The ice having been put into the glass, the water level is noted. Will any change in this level take place when the ice is melted ?

(*d*) Under what climatic conditions would mend the use in an Indian public office of (1) punkahs (2) khus-khus tatties ?